A Naturalistic Inquiry into the Experiences of Emergency Medical Technicians and Paramedics Who Become Registered Nurses

by

Shiela Renee Ford, MSN-ED, BSN, RNC

Dissertation

Presented to the Faculty of the Graduate School of

The University of Texas Medical Branch

in Partial Fulfillment

of the Requirements

for the Degree of

Doctor of Philosophy

The University of Texas Medical Branch

February 1, 2022

Dedication

This work is dedicated to every Emergency Medical Technician and Paramedic with a desire to become a nurse. To my parents, Charlie and Louise Eubanks, thank you for always pushing me to do more and be better. I miss you dearly and love you deeply. I wish you were here to see the manifestation of your hard work. Dr. Carolyn Phillips, thank you for supporting my desire to do conduct this research. Your honesty, patience, guidance and unswerving support is greatly appreciated. To my Apostle, Dr. Dana Carson, thank you for believing in me and publicly prophesying, I would earn this terminal degree. I sincerely appreciate your guidance and support along this journey. To my children, Caleb and Cayla, I love you more than words could ever express. Thank you for every ounce of encouragement. You both are some of my greatest accomplishments. To Evia, my one and only sister, thank you for loving me, encouraging me and simply being you. To Parker, my big brother, your expectations for me were always high. Thank you! To Norman, my brother from another mother, I love you! Thank you for always being there. Cedric, life threw us for a loop, but I thank you for every reminder that I could do it. Of course, I have to also thank you for Chassidy Love Ford. She is such a joy. To Dr. Veronica Jammer, WE did it. You are the epitome of a true friend; Proverbs 17:17. Thank you! To Min. Margie, Min. Findley and Min. Parrish, your support on this journey meant everything. I love you. To Cathy and Rita, the best prayer partners this side of heaven. Thank you for every petition. To Robert and Sherree, I realize there is absolutely no limit to what you two would do for me as you proved it time and time again. I love you. To Tony and Lisa, my first children – inside family joke, you make me want to be better. I love you! To Pastor Sekou and Cherrice Browne, your constant reminders that I could do this meant the world. I love you! To my Femi Michelle Browne, little one I have loved you from day one of your life. I know you are going to

do great things. In memory of Dr. Edward Nichols, you will never be forgotten. Thank you for encouraging me to do this study. I miss you. To “ROCKNation”, I am so glad God gave me every one of you. Our community is amazing. To Dancers for Christ (D4C), one of the main reasons I kept plugging away at this degree was because of every one of you. I knew quitting was not an option because you were watching. To my ELITE Sisters, God has blessed us with almost four decades of friendship. Thank you for always having my back and believing in me.

Acknowledgements

I would like to acknowledge my dissertation committee and thank them for all their support and guidance throughout this dissertation process. Dr. Carolyn Phillips, my dissertation chair, I would like to thank her for not giving up. It would have been impossible for me to finish this dissertation if it had not been for her persistence and sacrifice. To Dr. Dana Carson, my Shepherd, I would like to thank him for personally mentoring me through this process which aided in my completion. To Dr. Shannon Williams, I would like to thank her for willingness to spend valuable time encouraging, coaching and guiding me in the final stages of this journey. I would also like to thank the rest of my dissertation committee for their guidance and support. Dr. Jeff Farroni, thank you for being a set of fresh eyes with amazing questions. Dr. Carol Wiggs, thank you for sharing similar experiences with me as a nurse educator regarding EMT-Ps. Dr. Thom Mendez, thank you for seeing the value in my study and encouraging me to share the findings. Dr. Veronica Jammer, thank you for always being there as a sounding board, voice of reason, leadership mentor and guide.

I would also like to acknowledge every EMT-Paramedic who shared their experiences becoming nurses. Without your willingness to share, this dissertation would not have been possible.

Finally, I would like to acknowledge the generosity of The McGovern Foundation, The Gale Foundation, The Crawford and Hattie Jackson Foundation, Arthur V. Simmang Scholarship Fund, Graduate School of Biomedical Sciences, Lois E. Nickerson, R. N. Endowed Scholarship and UTMB School of Nursing Scholarship Committee. Your awards helped to make this degree possible.

List of Abbreviations

ADN	Associate Degree Nursing
BSN	Bachelor of Science in Nursing
BT	Bridge Track
EMT-P	Emergency Medical Technician & Paramedic
IRB	Institutional Review Board
NI	Naturalistic Inquiry
UTMB	University of Texas Medical Branch

TABLE OF CONTENTS

A Naturalistic Inquiry into the Experiences of Emergency Medical Technicians and Paramedics Who Become Registered Nurses

Publication No._____

Shiela Renee Ford, MSN-ED, BSN, RNC

The University of Texas Medical Branch, 2022

Supervisor: Carolyn A. Phillips

The United States has been faced with a nursing shortage for many decades (ANA, 2017). The increasing age of nursing faculty, the aging population, and retirement of bedside nurses further diminish the nursing workforce in the United States (ANA). One potential nursing recruitment source is Emergency Medical Technicians and Paramedics (EMT-P). EMT-Ps can bring important skills and knowledge to nursing. Concern about attrition of EMT-Ps from pre-licensure nursing programs and the dearth of literature about EMT-Ps who are interested in becoming registered nurses led to this Naturalistic Inquiry study (Lincoln & Guba, 1985; Erlandson et al., 1993) that explored the experiences of EMT-Ps who become registered nurses. Twelve EMT-Ps who were registered nurses at the time of data collection participated in the study. Data consisted of demographic and interview data as well as the researcher's observations. Study findings highlighted EMT-Ps' motivations for becoming a nurse, the challenge of adapting to a nurse mindset, and the process of coming to terms with being a nurse. The study findings

also provided information about how the EMT-P who became nurses identified themselves and some of the ethical dilemmas they face being EMT-Ps who are practicing as nurses.

Chapter 1 Introduction

INTRODUCTION

This dissertation utilized Naturalistic Inquiry to explore the experiences of Emergency Medical Technicians and Paramedics [EMT-Ps] who become registered nurses. Chapter One presents an overview of the researcher's stimulus for choosing this research topic. The Chapter continues with a discussion of the phenomenon of interest and the study problem as well as the research question and aim of the study. Chapter One continues with a discussion of the significance of the study, study design and methodology. Finally, the Chapter concludes with a plan for the remaining chapters.

PHENOMENON OF INTEREST

Nursing programs are responsible for educating the next generation of nurses to enter the workforce. Many programs find it difficult to fill their seats with qualified candidates who can endure the rigors of successfully obtaining a nursing education. EMT-Ps are health care providers who work, in many instances, autonomously to provide life sustaining measures to those in dire need. Some EMT-Ps decide to build upon their experiences and knowledge as EMT-Ps and become registered nurses. Yet, the observations of this researcher led to the conclusion that EMT-Ps tend to have difficulty becoming registered nurses. This research study explored the experiences of EMT-Ps who became registered nurses.

STUDY PROBLEM

The researcher has been a nurse for 30 years, and during the past 17 years, the researcher has worked in academia as a nurse educator and administrator. Part of her duties as an administrator was to head a program within the school of nursing that would assist EMT-Ps who wanted to become registered nurses. The researcher noticed some of the EMT-P nursing students

struggled to complete the nursing program and their attrition rate was high. The researcher turned to the literature for guidance in meeting the needs of this group of students and found very little information. The dearth of literature on the topic fueled a desire to know more about what was going on with EMT-P students who wanted to become registered nurses.

Research Question and Aim of the Study

The aim of this study was to explore the experiences of Emergency Medical Technicians (EMTs) and Paramedics who become registered nurses. Naturalistic Inquiry (Erlandson et. al., 1993 and Lincoln & Guba, 1985) was employed to answer the research question: What are the experiences of EMT-Ps who become registered nurses? The study aim was to learn more about the experiences of EMT-Ps who become registered nurses in hopes of providing nursing school administrators and educators with valuable information to potentially improve and promote successful outcomes for EMT-Ps in their programs.

Significance of the Study

There has been a decades-long shortage of registered nurses and this shortage shows no signs of abating as the healthcare system strives to maintain quality of care in light of the on-going COVID pandemic (The 2021 American Nursing Shortage, 2021). Although they make up a small percentage of registered nurses, EMT-Ps are one population who can contribute to mitigation of the nursing shortage and can bring needed knowledge and skills to nursing (Public Safety Degrees, 2016).

EMT-Ps may be interested in becoming RNs for several reasons. Nurses have higher earning potential, more opportunities for advancement, long-term job security, a variety of employment settings in which to work and the ability to specialize (Nurse.org, 2019, para. 3). Therefore, nursing may provide an option for upward mobility and professional growth.

In the role as a nurse educator, this researcher has observed a high drop out and failure rate of EMT-Ps who enter a registered nursing education program. This observation has been supported during conversations with other nurse educators in Texas and across the nation. To date, no research studies have been identified that explored the experiences of EMT-Ps who matriculated into nursing programs or completed nursing programs successfully. The findings of this study may provide information that will assist in the enhancement or development of best practices for educating EMT-P registered nursing students.

OVERVIEW OF THE STUDY DESIGN AND METHODOLOGY USED

The University of Texas Medical Branch (UTMB) Institutional Review Board (IRB) approved the study and all its procedures. A Naturalistic Inquiry (NI) approach (Lincoln & Guba, 1985 & Erlandson, et. al (1995) was used to explore the experiences of EMT-Ps who become registered nurses. NI was first introduced by Lincoln and Guba (1985) and further developed by Erlandson et al. (1993). NI designs are valuable for exploratory research, particularly when little is known about the phenomenon of interest or when relevant research or theoretical frameworks are not available or (Erlandson, et. al.).

SUMMARY OF INTRODUCTIOIN

Chapter One provided an introduction to the study beginning with an overview of the phenomenon and study problem. The Chapter continued with the research question and aim of the study. Finally, the Chapter presented the study significance, and the study methodology.

PLAN FOR REMAINING CHAPTERS

Chapter Two provides a review of the literature that has been identified that addresses the topic of EMT-Ps who become registered nurses. Chapter Three describes the methodology used to conduct this research. Chapter Four presents the study findings. And finally, Chapter Five

compares the study findings to extant literature, the study's implications, strengths, limitations and suggestions for future research**.**

Chapter 2 Review of Literature

THE CURRENT NURSING WORKFORCE AND ITS IMPACT ON HEALTH CARE

Chapter Two provides a review of literature related to Emergency Medical Technicians – and Paramedics (EMT-Ps) who become registered nurses (RNs). The Chapter begins by addressing issues surrounding the current nursing shortage and its effects on quality of patient care. The Chapter then provides an overview of the five levels of licensing and certification for EMT-Ps, the strengths EMT-Ps can bring to nursing, and a discussion of why EMT-Ps may decide to become registered nurses. Because many EMT-Ps enroll in nursing programs that offer Bridge Tracks (BTs) to nursing students who have a medical background, such as EMT-Ps, LVNs, and LPNs, a discussion of Bridge Tracks (BTs) will follow. The Chapter will end with a summary of the literature and statement of the research question that was addressed by this study.

THE NURSING SHORTAGE

The nursing shortage in the United States has been a problem for many decades. This shortage is growing because of the retirement of seasoned nurses and the aging of Baby Boomers (American Association of Colleges of Nursing [AACN], 2020; Nursing Shortage, 2020). The retirement of experienced nurses leaves less experienced nurses to provide bedside care (Workforce, 2017). In response to the nursing shortage, nurses are being required to work longer hours per shift to meet patient care demands although requiring nurses to work longer shifts can affect patient safety and increase the risk that nurses will be injured on the job (Phillips et al., 2020). Geiger-Brown & Trinkoff (2010) state, “recent studies demonstrate an increase in patient care errors when nurses work 12-hour shifts compared with 8-hour shifts” (p. 100). Although many nurses prefer to work 12-hour shifts as they have more days off, patient and nurse safety

are a concern. When nurses work long hours, Scott, Arslanian-Engoren, and Engoren (2014) state, “fatigued nurses are more likely than well-rested nurses to make faulty decisions that lead to decision regret, a negative cognitive emotion that occurs when the actual outcome differs from the desired or expected outcome” (p. 13).

Compounding the problem of the bedside nursing shortage is the increasing age and looming retirement of nurse educators, who are older than the average bedside nurse (Budden, et. al, 2013). Retirement of nursing faculty decreases the number of nursing educators available to teach nursing students, which directly correlates with the decreased number of nursing students who can be enrolled in nursing programs to be trained to become RNs (Haddad et al., 2020). The COVID 19 pandemic has affected the nursing shortage because of the increased need for nurses as well as the numbers of nurses leaving the bedside during the pandemic (The American Nursing Shortage, 2021). The COVID 19 pandemic also has impacted nursing faculty roles and the ability to successfully graduate prelicensure nursing students from nursing programs.

In summary, the nursing shortage will only worsen if the number of qualified applicants applying to nursing programs and the number of faculty to facilitate nursing program courses does not increase drastically. EMTs and paramedics who want to become registered nurses may be valuable options for joining the nursing workforce because they have prior healthcare experience.

QUALIFICATIONS TO BECOME EMT-PS

The Texas Health and Human Services Department (Texas HHS) describes five levels of certification for EMT - Paramedics: Licensed Paramedic, EMT-P, Advanced EMT, EMT-Basic and Emergency Care Attendant (ECA) (Initial Certification/Licensure, para 1.). In order to be certified as an EMT or paramedic in the state of Texas, the applicant must:

- Be at least 18-years old
- Have a high school diploma or GED certificate
- Successfully complete an approved Emergency Medical Services (EMS) training course
- Submit a completed (EMS) Certification application and fee
- Pass the National Registry exam
- Submit fingerprints for Texas/FBI criminal history check
- Hold a valid driver's license (Texas Health and Human Services/Texas Department of State Health Services, 2017)

The highest level of EMT- P is the licensed paramedic. Licensed paramedics have earned a bachelor's degree prior to obtaining their EMT-P certificate. In addition to all of the above requirements, applicants for paramedic licensure are required to "submit proof of either a two-year EMS degree or a four-year degree in any field" (Initial Certification/Licensure, para. 3). The Advanced EMT is able to provide a broader range of skills compared to an EMT-P. The EMT-Basic is able to perform basic health procedures such as Cardiopulmonary Resuscitation (CPR), while the Emergency Care Attendant supports the EMT and paramedic as they render emergency care.

EMERGENCY MEDICAL TECHNICIAN - PARAMEDIC

This document uses the term, EMT-P, to refer to Emergency Medical Technicians (EMT), Paramedics, and Emergency Medical Technician – Paramedics.

EMT-Ps can bring important skills and knowledge to nursing. A blog by Public Safety Degrees comments, "because of their training and experience, paramedics that become nurses are invaluable. After receiving a nursing license, a paramedic can be a more well-

rounded patient care provider with job experience to manage even the most dire emergency situations due to their previous expertise" (2016, paras 6 & 7).

> EMTs and paramedics who become registered nurses can be valuable members of the health care team in the role of a registered nurse because they bring character attributes that include but are not limited to the following qualities: adaptability, ingenuity, quick response time, flexibility, excellent communication, rapid assessment skills, and the ability to think critically (Henderson, 2009, p. 501).

EMT-Ps may be interested in becoming RNs for several reasons. Many EMT-Ps are attracted to nursing because nurses have higher earning potential; nurses also have more opportunities for career advancement, long-term job security, a variety of employment settings in which to work and to specialize (Nurse.org, 2021, para. 10). Therefore, nursing may be a viable option for increasing income, upward mobility, and professional growth for some EMT-Ps.

Many EMT-Ps enter Associate Degree Nursing (ADN) programs. Their attraction to ADN programs can be enhanced when the ADN program offers a Bridge track for students with previous nursing/medical experience who want to become registered nurses (Nurse.org, 2021, para. 4). Various terms are used to denote Bridge tracks; these include Mobility programs, Transition programs, Bridge/Transition programs, Bridge tracks, Transition tracks, and Bridge/Transition tracks. The term *Bridge track* (BT) will be used in this document. The goal of a Bridge track is to shorten the length of a nursing program for qualified students by allowing those students to opt out of courses in the nursing curriculum based on their previous nursing/medical experience (Nurse.org, 2021, para. 3). Usually Bridge tracks are designed to serve the needs of EMTs, Paramedics, and LVN or LPN students.

IDENTIFIED GAPS IN LITERATURE

Repeated searches of the literature revealed a dearth of literature around the topic of EMT-Ps who become registered nurses. To date, no literature has been identified that addresses the experiences of EMT-Ps who become registered nurses. Therefore, this Naturalistic Inquiry study (Erlandson et al., 1993; Lincoln & Guba, 1985,) was designed to explore the experiences of EMT-Ps who become registered nurses and to answer the research question, "What are the experiences of EMT-Ps who become registered nurses?"

SUMMARY OF LITERATURE

Chapter Two presented a review of literature related to Emergency Medical Technicians and Paramedics (EMT-Ps) who become registered nurses. The Chapter began by addressing the nursing shortage, and the effects of the nursing shortage on patient care. The Chapter defined the five levels of licensing and certification of EMT-Ps, the characteristics and strengths EMT-Ps possess and can bring to the nursing profession, the reasons EMT-Ps become nurses and the use of Bridge Tracks to assist EMT-Ps becoming nurses. Finally, the Chapter highlights the gap in literature regarding the experiences of EMT-Ps who become nurses.

PLAN FOR REMAINING CHAPTERS

Chapter Three presents the research design and methodology used to explore the experiences of EMT-Ps who become registered nurses. The use of Naturalistic Inquiry to shape the inquiry and guide the research including a discussion of participant recruitment and sampling strategies, data collection and management, and data was analysis. Chapter Four discusses the findings regarding the experiences of EMT-Ps who become registered nurses. Finally, Chapter Five reviews the study findings, conclusions, implications, and recommendations for further research.

Chapter 3 Methods

INTRODUCTION

Chapter Three presents the research design and methodology used to explore the experiences of Emergency Medical Technicians and Paramedics (EMT-Ps) who become registered nurses. The study used Naturalistic Inquiry (NI) (Erlandson et al., 1993; Lincoln & Guba, 1985) to address the research question: "What are the experiences of EMT-Ps who become registered nurses?" Chapter Three opens with a restatement of the research question and study aims along with a description of Naturalistic Inquiry (NI) and why it was used for the study. The Chapter describes how NI methodology was used to shape the inquiry and guide the researcher and includes a discussion of participant recruitment and sampling strategies, data collection and management, and data analysis. The Chapter closes with a discussion of how scientific rigor was established and the procedures used to protect human subjects.

RESEARCH QUESTION AND AIM

The research question that guided the study was: What are the experiences of EMT-Ps who become registered nurses? The aim of the study was to explore the study participants' perceptions of their nursing journey and identify strategies to assist EMT-Ps who want to become registered nurses so they can successfully complete their nursing program and become effective members of the nursing workforce.

NATURALISTIC INQUIRY

The study used Naturalistic Inquiry (NI) to explore the experiences of EMT-Ps who become registered nurses. The concept of NI was first introduced by Lincoln & Guba (1985) and was explicated further by Erlandson, Harris, Skipper & Allen (1993). NI is a useful research approach when very little is known about a phenomenon of interest. NI assumes that "human

beings must operate within realities they themselves have constructed. The process of inquiry becomes one of developing and verifying shared constructions that will enable the meaningful expansion of knowledge" (Erlandson, et. al., 1993, pg. 21) and to develop understanding of the realities of study participants (Erlandson et al., 1993). Naturalistic Inquiry's exploratory approach is ideal for the proposed study because little is known about the experiences of EMT-Ps who become registered nurses.

METHODOLOGY

The implementation of Naturalistic Inquiry in the study will be described in the following section. The section includes participant recruitment; sampling strategies, including inclusion and exclusion criteria; study setting; data collection; data management strategies; data analysis strategies; and human subject considerations.

PARTICIPANT RECRUITMENT AND SAMPLING STRATEGIES

The University of Texas Medical Branch (UTMB) Institutional Review Board (IRB) approved all procedures prior to implementation of this study. Please see Appendix A which includes documentation of the UTMB IRB initial approval and documentation of the addendum of the study proposal.

Emergency Medical Technicians and Paramedics who had become registered nurses were recruited for the study using purposive and snowball sampling techniques. According to Streubert & Carpenter (2011), purposive sampling is a form of homogenous sampling in which participants are selected because they have experience with the phenomenon of interest. Snowball sampling involves asking research participants, or members of the researcher's professional network, to share study recruitment materials with individuals who might meet study inclusion criteria and be interested in participating in the study (Morse & Richards, 2002).

PARTICIPANT INCLUSION CRITERIA.

Participants included in the study were:

1. Currently or formerly licensed or certified as an EMT or Paramedic in the United States
2. Currently enrolled in, or a graduate of, a registered nursing program
3. Able to speak, read, and write English
4. Willing to participate in one or more face-to-face or synchronous online audiovisual interviews
5. Had access to a computer and were able to use the computer to participate in synchronous online audiovisual interviews
6. Familiar with the use of online video conferencing technology.

PARTICIPANT EXCLUSION CRITERIA.

Potential participants were excluded if they did not meet all the inclusion criteria. EMT-Ps were not restricted from participating in the study based on gender, ethnicity, age, religion, or educational background.

SAMPLE

A total of twelve participants participated in the study. All participants met inclusion criteria and fully participated in the study. One individual who had responded to the recruitment flyer was not included in the study because the person had never been an EMT or paramedic.

By the twelfth participant, data analysis revealed data saturation and redundancy. Data saturation occurs when participants' accounts about their experiences become redundant, indicating that no new information can be gleaned by further data collection (Polit & Beck, 2018, p 55).

Two strategies were used to recruit participants for this study. The first recruitment strategy was purposive sampling. The researcher shared study details, including inclusion and exclusion criteria, and the recruitment flyer (Appendix B) with individuals in the researcher's peer network asking those individuals to share the materials with EMT-Ps they knew who were in nursing school or had graduated from nursing school. Study participants also were recruited using snowball sampling by asking study participants to share study information with other individuals in their peer network and inviting them to contact the researcher if they were interested in participating in the study. The recruitment flyer invites EMT-Ps who graduated from nursing school or are nursing students to contact the researcher by email if they were interested in participating in the study or wanted additional information about the study. Twelve of the thirteen prospective participants who responded to the recruitment information met the study inclusion criteria, were interested in participating in the study, were included in the study. Each of the twelve study participants was recruited via the peer network recruitment strategy.

When potential participants contacted the researcher, she responded with an email thanking them for their interest in the study and asking the potential participant to set up a phone conversation to discuss the study. Once potential participants provided their phone contact information and days and times they might be available, the researcher set up a phone appointment. On the designated day and time, the researcher phoned the potential participant and during the conversation, provided details about the study and answered any questions the potential participant had, she also assessed whether the person met the study inclusion criteria. Once the potential participant's questions had been answered, the researcher asked whether the potential participant was willing to participate in the study. If the person was interested in

participating in the study, they scheduled the initial data collection session at a date and time that was convenient for the researcher and participant.

SETTING

The University of Texas Medical Branch's (UTMB) Institutional Review Board approved conducting the interviews via online audiovisual synchronous conferencing via Zoom. The researcher encouraged the potential participants to select a day and time for the initial data collection when they would not be at work and could participate in a comfortable, safe environment where there would be minimal risk of interruptions. The researcher participated in data collection from her home office or her work office with the door closed.

When EMT-Ps agreed to participate in the study, the researcher set up a Zoom conference at a date and time agreed and provided the zoom link via email or text messaging.

DATA COLLECTION

Data collection occurred via the synchronous online audiovisual conferencing platform, Zoom. The day before the scheduled meeting, the researcher emailed the potential participant the Zoom link, Fast Facts Sheet (Appendix C), and provided a reminder of the meeting. On the agreed upon day and time scheduled for the initial data collection session, the researcher logged into the Zoom meeting from her home office. The researcher allowed the potential participant time to gain access to the Zoom meeting then greeted the potential participant and thanked them for their interest in the study. The researcher reviewed the aim and purpose of the study, discussed how the participant's information would be stored and safeguarded to ensure confidentiality and answered any questions the potential participant had. Once all questions were answered, the researcher obtained verbal consent to participate in the study utilizing the narrative for verbal consent (Appendix D). Once verbal consent was obtained, the researcher turned on

the Zoom recorder and the backup audio-recorder and asked the participants to repeat that they had consented to participate in the study.

Data collected during the study included the participants' demographic information, participant interviews, and the researcher's reflexive journal. The researcher began data collection with demographic data, reading the demographic questions from the bio-demographic data sheet (Appendix E). After collection of demographic information, the researcher proceeded with the interview using the interview semi-structured guide developed for the study (Appendix F). Each interview began with exploration of the participant's experience of being an EMT-P who became a registered nurse using the grand tour question, "Please tell me about your nursing school experience?" The interview also included topical probes, such as, "Why did you decide to become a registered nurse" "What were some of the challenges you encountered?" "What academic or financial resources were available to you as a nursing student?" The interview also included probes designed to clarify the participant's statements and encourage elaboration of ideas, such as "Can you tell me more about that?" Periodically during the interview, the researcher asked the participants if they were doing ok and if they needed a break before proceeding. At the conclusion of the interview, the researcher asked if the participant had any additional thoughts to share about their experiences being an EMT-P who had become a registered nurse. The researcher also asked participants if they could be contacted later if additional questions came up or if information needed to be clarified and told them how they could contact her if they had further thoughts about their experiences. Participants were reminded that if they had concerns about their participation, they could contact the researcher directly or contact the UTMB IRB. Participant interviews averaged 42 minutes and ranged from 24 to 57 minutes in duration.

The researcher made notes about the interview and recorded any observations after each data collection session. Memos were also made between interviews when the researcher reflected on data obtained from individual interviews. None of the twelve participants contacted the researcher after their interviews with concerns or to provide additional data.

The researcher conducted member checking interviews with four of the twelve study participants. The researcher contacted the four study participants individually via text messaging and asked to schedule another interview to share some information regarding the study findings. The four participants agreed and were interviewed separately via Zoom audiovisual conferencing technology; the sessions were recorded, transcribed, and identifying information masked as described below, in the "Data Management" section. The researcher began each member checking interview by reminding the participants that they had provided consent to participate in the study, asking them if they had any questions before proceeding, and informing them the session was being recorded. The researcher then shared with the participants the study findings, discussing each category separately, and asking them to share their thoughts about the information provided. The member checking interviews lasted an average of 24 minutes.

DATA MANAGEMENT STRATEGIES

All participant interviews were digitally recorded using two devices, the researcher's password protected iPhone 8 and "Zoom" recordings. The iPhone 8 and Zoom recordings were password protected and stored on the researcher's password-protected laptop which was kept in the researcher's private home office in a locked cabinet.

Data management began once the researcher ended the data collection session and the participant had logged off the Zoom site. Prior to ending the recording, the researcher documented her observations of participants' behaviors and responses, as well as any other

memos, thoughts about the data collection process, and any analytic comments. She then ended the recording and transmitted the Zoom audio file to the secure Trint ® website.

Trint® is an online transcription service that uses artificial intelligence to transcribe audio files. Audio files are uploaded directly into Trint's ® web-based artificial intelligence transcription software. Trint® notifies the subscriber when the transcription has been completed. The transcribed files remain on the secure Trint® server until the researcher has reviewed the transcript and has made edits as needed. This researcher downloaded her transcribed interviews from Trint®, then carefully reviewed them for accuracy by listening to the audio recording of the data collection sessions and comparing them to the transcription. She then transferred the edited transcript to her password-protected laptop as a Word document, then permanently deleted the transcription from the Trint® server. The original edited copy of the transcript was saved to a dedicated external hard drive that was stored in a locked cabinet in the researcher's home office.

A second copy of the original transcript was made, then de-identified by removing or masking participants' names, places of employment, geographic locations, or other information that could be linked to the participant. An identifying code, such as SP1 for participant 1 and SP2 for participant 2 and so on, was assigned to the second, de-identified transcript. The codebook linking participants' names and their identifying codes was stored on the same password-protected external hard drive as the original edited transcripts. The second, de-identified, transcripts were used for data analysis and were stored in a separate file on a different external hard drive, separate from the initial transcript and code book. All information related to the study will be destroyed at the completion of all research reports.

DATA ANALYSIS

Data analysis in a Naturalistic Inquiry study is an ongoing process which begins with the first set of transcribed data. According to Erlandson et al. (1993), data analysis is an ongoing process that is "never really complete" (p. 130). Erlandson et al. using Lincoln and Guba's (1985) work as a guide, identifies three elements of NI data analysis; each was used in this study. The elements of NI data analysis are unitizing data, emergent category designation and negative case analysis. Using the first step of data analysis, unitizing data, the researcher broke the data into small, independent pieces of information that individually represented a single concept or idea which was related to the phenomenon of interest. Each small piece of data consisted of a few words, sentence, or occasionally a small paragraph. Each unit of data represented a stand-alone thought about the phenomenon of interest (Erlandson et al., 1993).

The second element of data analysis is emergent category designation. This process involves analyzing all the small pieces, or units, of data, and placing them into categories which represents emerging ideas about the phenomenon of interest. The researcher utilized the Constant Comparative Method (CCM) (Glaser and Strauss, 1967) throughout data analysis to examine and data units and allow identification of categories. CCM is a process in which each item of data is compared to all other items within the individual data set and compared to data items in other data sets, allowing themes, or categories, to be identified. Using CCM, the researcher read through the transcript line by line, identifying data elements that spoke to the phenomenon of interest. The researcher constantly compared the pieces from each interview, sorting them into categories that were labeled to reflect their content. This process continued with the next data set, then the categories identified in the data sets were compared to each other; the process continued until the content of every interview had been compared to each other to

identify commonalities. The goal of this process was to search for meaning by clustering data and identifying themes. Erlandson et al. (1993) describe the process as follows:

- Select and read a unit of data;
- Read the second unit of data and compare it to the first. If the two units are similar, then combine them into one category. If are not similar, then create a new category;
- Continue this process until all units of data have been categorized;
- Develop titles or descriptive sentences to identify each category; and
- Finally, start the process over again, using the previously identified category titles or sentences to sort data

The units of data were categorized and grouped by related, emerging themes which provided more information about the phenomenon of interest. This process allowed categories to develop naturally from the data along with the researcher's growing understanding of the data. Table 3.1 illustrates how identified data items were categorized and how the themes evolved as data analysis proceeded over time.

The last element of NI data analysis is negative case analysis, which is the process of considering alternate interpretations or constructions for the data. Any alternative interpretation that arises from the data should be addressed and considered in order to enrich and test the study conclusions. Negative case analysis was conducted during discussion and review of data with the researcher's dissertation committee chair. Although no negative cases were identified, perusal of the data did reveal an additional question that was followed up when the researcher conducted member checking.

Table Findings 3.1 Evolution of Study Categories

Exemplar Quote	**Time 1 Categories**	**Time 2 Categories**	**Final Categories**
"As a nurse, you're not by yourself. You're not	Why Becoming a Nurse	Reasons for Becoming a Nurse	Motivation for Becoming a Nurse

dragging 400 pounds upstairs with two people" (SP2, 263).			
"My nursing school experience was at first, it was quite challenging because I had the mentality of a paramedic: And it was difficult because our [EMT-P] mindset is completely different from the mindset of nursing. So we tend to kind of jump to conclusions a little bit. 'We've got to do this. We've got to do that.' As opposed to slowing down and looking at the whole picture (SP3, 67 - 68, 71 – 76).	Think Like a Nurse	Coming to Grips with a Nursing Mindset • Think Like a Nurse • Nursing School Experience	Adapting to a Nursing Mindset • Think Like a Nurse • Nursing School Experience
	Nursing School Experience • Nursing Program Curriculum/ Bridge Program • Clinical Experiences • Nursing Faculty	Subcategory of Coming to Grips with a Nursing Mindset	Subcategory of Adapting to a Nursing Mindset
"As one participant stated, "I don't know what other people have told you, but, I don't really consider myself fully a nurse, but I'm not just a paramedic" (SP12, 683-686).	Identity as a Nurse	Identity as a Nurse	Coming to Terms with Being a Nurse • Accepting Differences • Status Change • Self-Perception: Nurse or EMT-P

TRUSTWORTHINESS

Trustworthiness, or rigor, are the terms used to evaluate the truth of qualitative research. Trustworthiness means the research findings are believable and can be relied upon to reflect and represent the data collected (Lincoln & Guba, 1985). According to Lincoln & Guba, trustworthiness is about establishing credibility, transferability, dependability and confirmability.

CREDIBILITY

Credibility is confidence in the findings of the study and study procedures. Credibility is comparable to internal validity in quantitative studies (Beck, 1993). Strategies to support credibility in the study included providing rich thick descriptions such as direct participant

quotations, the audit trail, and member checking. The audit trail began with the data and included the researcher's field notes. These notes provided documentation of the data and all decisions made during data analysis through the final reports of the study. Credibility was supported by the utilization of a peer debriefer, the researchers' dissertation advisor, who reviewed every step of the study. An additional strategy to assure credibility was member checking in which the researcher presented a summary of the findings to one third of the study participants (4/12) to determine whether the findings were consistent with their experiences.

TRANSFERABILITY

Transferability means the research findings have applicability in other contexts. Transferability is comparable to generalizability in quantitative research. Strategies to support transferability of the proposed study was supported by purposive sampling and rich thick descriptions of the data as well as attempting to recruit study participants from a variety of backgrounds and from a across the United States as well as participants who had graduated from both ADN and BSN programs.

DEPENDABILITY

Dependability means the findings are consistent, reliable and can be repeated. To support dependability, the study utilized the audit trail and peer debriefer.

CONFIRMABILITY

Confirmability is the ability for research to be corroborated by others. Confirmability of the study findings was supported by the peer debriefer, the audit trail, and member checking.

HUMAN SUBJECTS

The University of Texas Medical Branch (UTMB) Institutional Review Board (IRB) approved all study procedures before the study was initiated. Each participant was informed of

the study procedures and the risks of participation and gave consent to participate. The risks associated with the study were minimal. Potential risks to human subjects included loss of confidentiality, interview fatigue, and emotional distress.

Strategies in the study that were designed to protect participant confidentiality included conducting data collection with both the researcher and the study participant in locations that were private and provided minimal risk of interruptions. Confidentiality of the data was protected using a number of strategies beginning with use of an Artificial Intelligence (AI) system for transcription. Any information that could link the data to an individual participant was masked or removed from the data and a code replaced the participant's name on transcripts use for data analysis and in reports of the study. The initial transcripts of the data collection sessions and the code books containing the participant's name and code were stored in a different location from the materials used during the data analysis and writing processes and under lock and key in the researchers' home when not in use. All information related to the study will be destroyed at the completion of the study reports.

To avoid the risk of potential fatigue and emotional distress, data collection sessions did not exceed 90 minutes. In addition, the researcher observed participants for indications of fatigue and/or emotional distress and occasionally checked the participant's status by asking questions such as, "Are you OK to continue?" If participant exhibited fatigue or emotional distress, the researcher asked the participant if he/she wished to continue, take a break, or end the interview. Participants were given the opportunity to withdraw from the study at any time and without adverse consequences. No participants exhibited or reported fatigue or emotional distress during the data collection sessions.

SUMMARY OF METHODS

Chapter Three presented the study's research question and the aim of the study followed by a description of Naturalistic Inquiry; the methodology used in this study. Chapter Three also discussed how participants were recruited and the sampling strategies implemented followed by a detailed description of data collection and management procedures, including data analysis. Finally, Chapter Three concluded with a discussion about how scientific rigor was established and considerations for human subjects.

PLAN FOR REMAINING CHAPTERS

Chapter Four will present study's findings regarding the experiences of Emergency Medical Technicians and Paramedics who become registered nurses. The final chapter, Chapter Five, will present a discussion of the study findings, conclusion, implications and recommendations for further research.

Chapter 4 Findings

INTRODUCTION

Chapter Four will present the findings of this study that explored the research question, "What are the experiences of Emergency Medical Technicians - Paramedics (EMT-Ps) who become registered nurses?" The Chapter will begin with the demographic information about the EMT - Ps who participated in the study followed by a discussion of the study findings.

STUDY PARTICIPANTS

The Participant's demographic data is presented in Table 4.1. The sample was comprised of 12 participants (N=12). Each participant is identified by participant number (SP1, SP2, SP3, etc.) rather than by name for confidentiality purposes. Male and females were equally represented (6 males and 6 females). Ten participants were Caucasian, one Hispanic and one was Asian (Indian). Participants' ages ranged from 29 – 51 years old (M=39). Ten participants resided in Texas, one resided in Alaska, and one resided in Florida. Six participants were Licensed Paramedics, three were Emergency Medical Technician – Paramedics, one was an Advanced Emergency Medical Technician, and two were Emergency Medical Technicians – Basic. Ten participants had graduated from Associate Degree Nursing (ADN) programs and each of the ADN programs had a Bridge Track for EMT-P. Two participants graduated from Bachelor of Science Nursing programs; none of the Bachelor of Science in Nursing (BSN) programs offered a Bridge Track for EMT-Ps (see Table 4.1).

Table 4.1 Participant Demographics

Age	Gender	Location	Basic RN Program	Highest Degree
35	F	TX	ADN	MSN
39	F	TX	ADN	ADN
32	M	TX	ADN	BSN
51	M	TX	ADN	EdD
35	F	TX	ADN	MSN
37	M	FL	ADN	ADN
29	M	TX	ADN	BSN
46	M	TX	BSN	PhD
51	F	AL	ADN	ADN
43	F	TX	ADN	ADN
32	F	TX	BSN	BSN
36	M	TX	ADN	MSN

Four participants maintained their EMT-P certification at the time of data collection. While 8 participants no longer maintained the credential. Two of the twelve participants worked as an

EMT or paramedic in addition to working as registered nurses. All of the participants were registered nurses at the time of data collection. The participants had been working as nurses for 8 months to 22 years (M = 8.75 years). All but one participant was currently working as a nurse full time. Four participants worked as nurses in hospital settings; two were nurse educators, one in a community college setting and the other in a university setting; two participants worked in clinics; one worked as a flight nurse; one worked in home health; and one was a hospice nurse. The remaining participant was not working in order to attend graduate school (see Table 4.2). The participants held a wide variety of certifications both as EMT-Ps and as nurses (see Table 4.3).

Table 4.2 Current Working Status

	EMT-P			**RN**		
Participant	Maintain EMT-P Certificate	Working as an EMT-P		How Long a Nurse (In Years)	Current Employer	Role
SP1	Y	N		8	Hospital & Urgent Care	FNP
SP2	Y	Y		9	Hospital	Staff RN
SP3	N	N		8	Hospital	Staff RN
SP4	N	N		22	School	Nurse Educator
SP5	N	N		9	Unemployed	Student
SP6	N	N		2	Hospice	Staff RN
SP7	Y	Y		5	Other	Flight Nurse
SP8	N	N		17	School	Nurse Educator
SP9	N	N		6	Home Health	Staff RN
SP10	N	N		8	Clinic	Staff RN
SP11	N	N		<1	Hospital	Staff RN

SP12	Y	N		10	Clinic	FNP

Table 4.3 Participant Certifications

Type of Certificate	#
EMT-P	
Licensed Paramedic	6
EMT-P	3
Advanced EMT	1
EMT – B	2
Emergency Care Attendant	0
RN	
ACLS	6
PALS	5
BLS	11

Legend:

ACLS – Acute Care Life Support
BLS = Basic Life Support
EMT = Emergency Medical Technician
EMT- P = Emergency Medical Technician – Paramedic
PALS = Pediatric Advanced Life Support

INTRODUCTION TO FINDINGS

The goal of the study was to gain an understanding of the experiences of EMT-Ps who become registered nurses. Analysis of the data revealed four categories. These categories and their subcategories are:

I. Motivation for Becoming a Nurse
   A. Desire to Learn More
      a. Patient Care Beyond Paramedic Scope
      b. Curiosity
   B. Safety
      a. Physical
      b. Mental
      c. Environmental
   C. Financial

a. Increase Salary
b. Career Advancement

D. Dream

II. Adapting to a Nurse Mindset

A. Think Like a Nurse

i. Change Mindset

a. From Emergent to Urgent/Priority
b. Big-Picture/Wholistic Perspective
c. Pre-Hospital to In Hospital

ii. New Skills

B. Nursing School Experience

i. Nursing Program Curriculum/Courses/Clinical
ii. Bridge Programs
iii. Fitting In
iv. Nursing Faculty Members

III. Coming to Terms with Being A Nurse

i. Accepting Difference
ii. Status Change
iii. Self-Perception: Nurse or EMT-P

Table 4 demonstrates the evolution and conceptualization of the categories at three different time periods of the data analysis process.

Table 4.4 Evolution of Study Categories

Exemplar Quote	**Time 1 Categories**	**Time 2 Categories**	**Final Categories**
"As a nurse, you're not by yourself. You're not dragging 400 pounds upstairs with two people" (SP2, 263).	Why Becoming a Nurse	Reasons for Becoming a Nurse	Motivation for Becoming a Nurse
"My nursing school experience was at first, it was quite challenging because I had the mentality of a paramedic: And it was difficult because our [EMT-P] mindset is completely different from the mindset of nursing. So we tend to kind of jump to conclusions a little bit. 'We've got to do this. We've got to do that.' As opposed to slowing down and looking at the whole picture (SP3, 67 - 68, 71 – 76).	Think Like a Nurse	Coming to Grips with a Nursing Mindset • Think Like a Nurse • Nursing School Experience	Adapting to a Nursing Mindset • Think Like a Nurse • Nursing School Experience

	Nursing School Experience • Nursing Program Curriculum/ Bridge Program • Clinical Experiences • Nursing Faculty	Subcategory of Coming to Grips with a Nursing Mindset	Subcategory of Adapting to a Nursing Mindset
As one participant stated, "I don't know what other people have told you, but, I don't really consider myself fully a nurse, but I'm not just a paramedic" (SP12, 683-686).	Identity as a Nurse	Identity as a Nurse	Coming to Terms with Being a Nurse • Accepting Differences • Status Change • Self-Perception: Nurse or EMT-P

The following section presents the study findings. Quotations from the study participants are used as illustrations. Quotations from the initial data collection transcripts are cited in the following format: (SP1, 102); this citation indicates that the quotation was from the interview with Study Participant 1 and was located on line 102. Quotations from the member checking sessions are cited as SP, MC 377) meaning the quotation was in the member checking transcript with Study Participant 1 and was located on line 377.

MOTIVATION FOR BECOMING A NURSE

All of the participants in the study were Registered Nurses (RNs) at the time of data collection. They decided to become nurses for a variety of reasons. Some had a desire for more learning in general or were curious about what happened to their patients after they dropped them off at the hospital: "…every time I would drop off a patient into the emergency room that I would pick up as a medic, I felt like I was still lacking some of that understanding of what happens to my patient after I dropped them off and I wanted to broaden my knowledge level and that was what drove me to continue to further my education" (SP1, 135-142). Another added, "I was curious what happened, especially for the really sick patients that went up into the ICU"

(SP8, 1076). One participant liked to learn and wanted to venture into learning beyond the education received as a paramedic: "And so, I said, 'OK, well, I like learning. I'm always curious, what do I do now?' And I wanted to do something beyond paramedic. . . So, I just thought. . . jumping over to RN seemed like a logical choice because of the transition program. So basically, I said, Well, I want to learn more. I want to expand my knowledge base in my role. I guess I'll go be an RN'" (SP12, 240 - 249).

Several participants reported that part of their motivation for becoming a nurse arose from their concern about their own safety while working as EMTs or Paramedics. As EMTs or paramedics, they had encountered threats to their physical and mental well-being as well as threats from the environment. Being an EMT or paramedic places demands placed on the person's body. For example, EMT-Ps have to do a lot of lifting and carrying. Patients may be obese or in locations that require transporting them up and down stairs on stretchers without having enough manpower to ensure proper lifting and to prevent injury. A participant commented, "….as a nurse, you're not by yourself. You're not dragging 400 pounds upstairs with two people" (SP2, 263). Not only do EMT-Ps carry patients on stretchers, but equipment and equipment bags must be carried to the patient's location in order to have the supplies and equipment to perform their job: "We still have to carry stretchers and still carry bags and equipment. So that, in its own right, is taxing on the body. Sometimes you got to go upstairs, sometimes you have to carry people downstairs" (SP2, 293 - 296). Another participant commented, "So as a paramedic, you're lifting stretchers with people on them into the back of the ambulance. You're carrying people up and down stairs on backboards. You're scooping people out of cars. You're – there's just, the amount of stress that you put on your body, shoulders, neck, back…" (SP9, 118 - 123). Some participants found that years of being an EMT-

P was beginning to wear out their bodies, “I just knew my body couldn't handle being a paramedic anymore. It was done. I was done” (SP9, 106 – 109).

The study participants also cited concerns about the effects of being an EMT or paramedic on their emotional well-being. EMT-Ps are first responders and often are called by police to scenes of accidents or crimes where people had sustained terrible injuries or were in dangerous situations. Many reported that they needed someone to talk to and more emotional support to deal with some of the accidents and incidents they had responded to when working as EMTs or paramedics. One participant believed that many EMT-Ps experience Post Traumatic Stress Disorder (PTSD), as had been that participant’s experience, while working as an EMT-P. The participant stated, “I worked in some pretty rough areas as a paramedic and I’ve seen some things people have done to each other. I have seen wrecks that I mean, decapitation, all kinds of things. So as a paramedic, I definitely have PTSD” (SP9, 722 – 731). Another participant shared, “…you know, it's the worst time of someone's life whenever you're involved with them [as an EMT-P]. I'm a real sensitive person. And so, it was very emotional for me (SP4, 109). A third participant commented, “mental health is a big - is a big problem and an issue that is frequently not addressed . . .as a paramedic and it's frequently swept under the rug. . . Just suck it up. . . It needs to be addressed” (SP5, 477).

Concerns about environmental safety was an additional factor that led the study participants to decide to become nurses. EMT-Ps may be required to enter dangerous environments to care for people. Participants reported having been required to provide care during gang wars or during bad weather: “Never knowing what you're walking in on, I mean there were times I worked in high gang areas and so somebody gets shot. Am I going to get shot because I'm trying to help this person that just got shot?” (SP9, 360 - 364). Another said, “The

weather was awful. Everybody gets in wrecks when it's raining or when it's icy, you know, and it was just a little too much for me to handle. And so, I wanted a more controlled environment. And nursing really was perfect for me" (SP4, 113 - 117).

Several of the participants were motivated to become a nurse for financial reasons. All agreed that although EMT-Ps may perform some of the same job responsibilities as nurses, EMT-Ps receive much lower compensation: "So, he had like 20 years' experience [as an EMT-P] and he was making twenty dollars an hour, but, you know, a new grad nurse was making 20 an hour." (SP8, 1097 – 1101). One participant expressed, "these people [nurses] make so much more money than you are [as an EMT-P] and you're like, 'I can do that job'" (SP2, 1108 - 1109). Nursing also offered more opportunities for career development and retirement security than did working as an EMT-P. A participant commented, "Well, nursing offers infinitely more career opportunities. It offers better work-life balance. It's more family friendly. It's safer. It's more respected. I mean, there are not a lot of retirement options for paramedics, right? I mean, what do you do if you're a street paramedic and you want to advance your career? You really don't have any options. You can either work until you have a career-ending injury or until you get hurt in other ways; God forbid" (SP12, 1036 – 1046).

Some of the study participants had become registered nurses because it was a life-long dream. A participant said, "I always dreamed of being a nurse as a kid, but I settled for becoming a paramedic. And once I was afraid of nursing school because I was always – I had the mindset that nursing school was hard and there was going to be hard tests and I just didn't know that I could do it" (SP3, 108 - 113). Another said, "I decided to become a nurse years before I even became a paramedic" (SP4, 75).

In summary, nursing offered each of the study participants a way to improve their lives. They believed they were physically and emotionally at less risk as nurses. Nursing offered financial and career opportunities beyond what was available to them as Emergency Medical Technicians-Paramedics. Nursing for some participants was the realization of a life goal.

ADAPTING TO A NURSE MINDSET

The study participants described their experiences as they modified their thinking from only thinking like EMTs or paramedics to learning to think like a nurse. The internal process of learning how to adjust their thinking took place while they were nursing students.

The study participants had a lot to say about their experiences as nursing students. Every participant discussed their nursing program curriculum and their clinical experience as well as their interactions with the nursing faculty. None of the participants spontaneously mentioned their need for or access to various resources in their nursing program, although they did reflect on their school's resources when they were asked by the researcher.

Almost all (10/12) of the participants, mentioned the challenge of changing their mindset from thinking like an EMT or paramedic to thinking like a nurse. The need to change their thinking became very apparent from the beginning of their nursing school experience. They had to shift from an emergent/urgent focus as an EMT-P, to the more holistic, big-picture perspective of a registered nurse. One participant said:

> My nursing school experience was at first, it was quite challenging because I had the mentality of a paramedic. And it was difficult because our [EMT-P] mindset is completely different from the mindset of nursing. We tend to kind of jump to conclusions a little bit: 'We've got to do this. We've got to do that.' As opposed to slowing down and looking at the whole picture (SP3, 67 - 68, 71 – 76).

The EMT-Ps also found learning to create nursing care plans to be difficult, in part because they had to consider the patient long-term:

> Formulating those care plans was quite difficult because we [EMT-P] wanted to be like, 'This patient has CHF.' But being able to formulate that in a nursing aspect was much too, I say difficult. It was more challenging. It was difficult. It was having to rethink and reorganize our thoughts instead of going straight to, 'Oh, we need to get an airway.' It's you know, 'Let's think about the entire picture.' Instead of just worrying about, you know, one of the emergent needs like we're trained as a paramedic (SP3, 141 – 151).

In summary, the EMT-Ps who participated in the study mentioned the need to change the way they thought. They identified a need to shift their thinking from EMT-Ps to a nurse mindset which required changing their focus as an EMT-P from emergent/urgent thinking to a long-term, holistic, big-picture perspective as a nurse.

As noted in table 4.1, all but three of the study participants had experienced a Bridge Track (BT). Two of the study participants had completed BSN programs, so they had not had a Bridge Track and one participant's ADN program did not include a BT. The nine participants who had attended BTs freely shared their varied nursing school experiences. One participant's Bridge Track allowed EMT-Ps to enter the nursing program in the second semester and the LVNs, who also were in the Bridge Track, entered the nursing program in the third semester. This participant shared:

> [The] first semester [for generic nursing students] was like assessment, we [EMT-Ps] know how to do assessments, so we got to skip that. We went right into the second semester. And I'm like, 'Why can't we hop in with the LVNs? You know

> we still do a lot more than LVNs. Maybe they do pumps or whatever. But we still have to do the same skill clearance on stuff like NG tubes and Foleys, because that was a whole separate class (SP2, 715-722).

Another participant's BT lasted three semesters after the BT students had completed the nursing program's prerequisite courses:

> So, it [Bridge Track] was actually pretty awesome. I was with two other paramedics and the rest of the transitions [students], I think there was 15 of us who were [EMT-Ps, LPNs or LVNs], I guess because we had previous medical experience. We all kind of clicked together because we had previous experience. So, the first semester we [EMT-Ps and LVNs] were by ourselves and then they [put] us with the second-year [traditional] students who had no medical experience at all. So, we all helped each other study. We were each other's shoulders because nursing school is hard, and so, we supported each other really well (SP9, 50 – 66).

Another participant described their BT as one in which EMT-Ps and LVNs started the program together for one semester. Following the first semester, the EMT-Ps remained separate from the generic students while the LVN students joined the generic students. The EMT-Ps remained separate throughout the program. In addition, the program added an OB course to the EMT-Ps' program requirements so the EMT-P students graduated one semester behind the generic and LVN students, making the EMT-Ps' nursing program 2 ½ years rather than 2 years. The EMT-P students resented having this additional time added to their nursing program:

> I decided to become a nurse, because they had a Bridge Track. I was under the impression that it was going to be faster. It ended up not being any faster than

> starting nursing school from scratch. . . In my opinion, they kept moving the goalposts (SP10, 96-108).

Like the experience of participant SP10, the Bridge experience for SP2 allowed LVNs in the Bridge Track to join the generic students during the second semester, while the EMT-Ps were kept separate until the third semester when they were allowed to join the generic students for one term:

> I felt like it was a waste of our time to go into second semester and not just be with the LVNs. I had to do the same classes they [LVNs] did for bridging. . . so, we're like, 'OK, you're telling us to do it, but we can't go with them when they go in the third semester'" (SP2, 736-740).

Another participant had a somewhat different BT experience. The participant stated:

> I was a little jaded, but I did appreciate that they even let us kind of bridge over. And we didn't have to wait, so that's a plus, right, because, you know, [getting into nursing school] is super competitive and if you didn't have a background, you were like three semesters waiting to get into nursing school. But as EMT-Ps, we didn't have to wait because they held so many [slots for us]. (SP2, 723-734).

One participant's BT, which included LVNs as well as EMT-Ps, placed BT students in separate classrooms on separate floors in the same building where generic students were being taught:

> We were down on the first floor in a classroom on the end of the hall, we were not even around any other nursing students and we didn't wear uniforms. So I didn't know who was or wasn't a nursing student. We were very separated. We were in that one room for the whole first semester, first semester and a half. And then finally, we went upstairs where the other nursing students were. We felt

> sometimes like we were a little outside of what was going on [because] we were separated while I was going through [the program] (SP4, 510-520, 674).

Although the EMT-P nursing students had moved into the same classroom as the generic nursing students, the EMT-P students continued to feel they were not part of the student group for the remainder of their nursing program.

The EMT-P students also felt different from other students in the nursing school class because of their age and experience. One participant explained:

> We ended up in another class with younger girls with no previous experience. So we ended up kind of like going backwards. I guess we ended up in a class with a bunch of people that had not even been anything else before, they were just doing the program and going straight to RN from zero (SP10, 275 - 283).

Some of the participants had ideas about what could be done to improve Bridge Tracks. One participant stated:

> Give them [EMT-Ps] a skills course and integrate them with the generic students, as much as you can. Find opportunities to put them [generic students and EMT-Ps] together, because I felt very separated from the generic students and I felt a 'little less than,' to be honest with you. I felt a little like, oh, you know, 'I'm transitioning. I'm not a generic.' I don't know. It just was a difference. It was a different feeling (SP4, 652 - 659).

Although the Bridge Tracks could offer EMT-P nursing students a shorter program, BTs also risk creating an environment where EMT-P nursing students feel different, "other," and separate from the generic nursing students.

The study participants were not unlike other nursing students in finding some courses more difficult than others despite their backgrounds as EMTs or paramedics. One participant encountered difficulties in the Health Assessment course:

> Patient assessment in the [nursing] course you are [learning] head-to-toe. As EMT-Ps, if somebody calls and says they have chest pain, I am strictly focusing in on that and then their respiratory [system]. I am not gonna to do an assessment all the way from head to toe. So, I think I had to grasp that concept and say, 'Look you have to do a systematic approach versus direct approach.' I think I struggled a little bit in that class" (SP1, 294 – 302).

The participants were complimentary about general aspects of their nursing programs. A participant appreciated how each course in the nursing curriculum built upon current or previous courses:

> We utilized the material that we learned from the previous class to make us excel in the class [we were taking]. . . We were in pharmacology and when we were in our next class we weren't, being like, 'What is this medication?' We already learned the medication because we took pharmacology (SP3, 254-261).

Another participant liked how the nursing courses were aligned: "Yeah, I think overall, the content delivery, the ability to have lecture and then have clinical [helped]" (SP7, 336-338). All of the participants were satisfied with their clinical rotations. One stated, "Overall, I thought the organization was well throughout the whole program, [it] was done well, as well as the clinical, we were set up with some really good clinicals and really good clinical sites" (SP5, 274 – 279). Another stated:

> I feel like the clinicals were very organized. They [were] very on top of where we're going to meet, what unit, what time, what to bring, what to wear, what to expect. Like that part was very organized. Nobody went to the wrong hospital or went to the wrong unit or anything like that. And they did well with keeping the clinical groups small (SP10, 249 – 257).

The nursing faculty members had an important impact on the study participants' nursing school experience. Many felt they had not been heard by faculty or thought their previous health care experiences were undervalued by nursing faculty: "I felt cheated. I felt like it [the program] discounted all of our experience . . . if I wanted to go to nursing school from scratch, I probably wouldn't have done it" (SP10, 415 – 418). Several frustrating experiences with the nursing faculty made participants feel EMT-P's medical skills and experiences were undervalued. One participant essentially shut down: [I'd] just do what I was supposed to do and just be quiet. That's it" (SP10, 390). A second participant echoed the experience during member checking stating, 'Just keep your mouth shut. Keep your head down and do your work (SP2, MC 377-378). A participant reported feeling being treated differently and unfairly compared to generic nursing students:

> I don't think they appreciated having [EMT-Ps] in their class. I don't know if that's because they thought [EMT-Ps] think they know everything so they can't be taught. I think that they did not appreciate having the [EMT-Ps] in the class. They didn't mind having the LVNs, but for some reason they treated the [EMT-Ps] a little more at a distance (SP9, 590 – 600).

A participant in member checking also thought the LVNs in the BT were seen more favorably by faculty than the EMT-Ps, adding:

> I felt like it being a nursing program it was geared more toward the LVNs but, I don't think it was that way intentional. I think it was just I am going from a medic to a nurse and the LVNs had an upper hand on me in that regard because they have already been in that mindset (SP7, 227 – 233).

With one exception, the study participants did not experience problems with their clinical nursing faculty. For example, although they accepted that they had to unlearn how they performed some skills as EMT-Ps and learn how to perform the skills the way nurses perform them, they found it difficult to understand or accept why learning the skills the nursing way was important if the outcomes of performing the skill the EMT-P way provided the same result and was not incorrect or unsafe. One participant told of an experience with a nursing faculty member who criticized how the participant had cleaned the top of a vial prior to withdrawing a medication. The participant cleansed the vial with an alcohol pledget: "[The faculty said], 'You can't rub alcohol there.' I'm like, 'why'? They're like, 'because the [pledget] can rip in half, then rip in pieces that could get in the way.' I'm like, 'You're lying to me right now'" (SP2, 765 – 768). The nursing faculty member also criticized the participant's holding the vial rather than placing the vial on the counter:

> So, in the back of a moving ambulance, you can't set the vial on the counter and stab it with the needle because everything's moving. You're all moving, everything is going. And they're [the faculty] like, 'I can't believe you just held that vial in your hands to stab it with a needle.' I was like, 'Look, I get it. I'm sorry. I apologize. You will probably tell me a million times to do it this way. This is how I've always done it. You know, I control it with both of my hands together. I can control the vial and the needle a lot better than if I'm setting the

> vial on a counter and I'm coming at it with a needle, like I get it. I get where you're coming from, but I need you to understand where I'm coming from.' . . . I'm surprised I didn't fail clinicals just for those particular reasons right there" (SP2, 769-781, 787-789).

During member checking one participant commented:

> I think this problem stems from ignorance from both parties. For paramedics, it's kind of an inability to recognize their own incompetence because they don't know what they don't know . . . [while] for nursing faculty, it's ignorance because they don't understand [that] relatively speaking, paramedics are pretty highly trained . . . They're good at what they do. (SP12, MC, 312-329).

None of the participants spontaneously described the need for, or use of, resources in their nursing programs that facilitated their learning or promoted their success. Nevertheless, when asked by the researcher, some of the participants mentioned resources such as retention specialists who had been available to assist them with understanding course material; financial resources, such as grants and scholarships; or counselors to help them handle the stress of nursing school. One stated:

> Uhmmmmmm academic resources, we had a uhmmmm…..what was he called….he kinda worked like a tutor, ahhhhhh I'm trying to think of the specific name that they used for him but if we had any specific classes we could go to him and he could provide us with resources or help talk to the professors to be able to get information so he could teach us what we needed (SP1, 155 - 162).

Other resources mentioned were the library, access to online publications, and the internet where the nursing students were able to find videos, sample test questions and a variety of NCLEX

preparation resources: “Well, they had several test banks. We had the library. The online library had all kinds of different resources for peer reviewed articles and stuff like that. And then, of course, our textbooks” (SP9, 264-270).

Several participants mentioned the importance of their family as well as their own personal resources as factors that helped them succeed in their nursing program. One said:

> My family, but not everyone has that. [And] I was lucky enough to find a job that kind of worked with me, they could see me as a long-term investment. So, whenever I finished nursing school, I [went to work in that institution]. I did not take out any student loans, but I knew that was available to me if I needed it. But fortunately, I didn't (SP5, 232-241).

Another participant shared, “My parents paid for everything and gave me a car, put me in an apartment. I didn't work” (SP4, 296).

In summary, adapting to a nurse mindset was the internal processes the EMTs and Paramedics who participated in the study went through while they were student nurses. The participants in the study shared what they thought worked well and did not work as well during their nursing school experience. Participants who had a Bridge Track in their A.D.N. curricula had a wide variety of experiences. The BTs caused the participants to feel isolated, as if they were treated differently than the generic students and as if their knowledge and skill as EMT-Ps were not appreciated. The EMT-Ps believed their previous medical experience was not valued by some nursing faculty and their discussions of what they had learned as EMT-Ps often was not welcomed in dialogues. Overall, the participants found their clinical rotations to be valuable and well-coordinated with what was being discussed in their theory/didactic courses.

COMING TO TERMS WITH BEING A NURSE

Coming to terms with being a nurse reflected the participants' understanding of how to be a nurse compared to being an EMT-P and how they learned to inhabit each role. All of the participants were registered nurses at the time of data collection (8 months – 22 years, mean 8.75 years). Participation in the study caused the participants to reflect on the differences between being EMT-Ps and being nurses: the differences in income, the differences in patient care focus, working alone or with another person compared to being a part of a health care team, and working in a male-dominated versus female-dominated environment. The participants discussed the differences in autonomy in the two roles; the necessity that nurses have physician's orders to perform care, and the meaning of these differences in terms of their status. Finally, coming to terms with being a nurse affected how the participants viewed themselves: as nurses, as EMT-Ps, or as both.

Many of the study participants had become nurses because of the difference in pay. One participant compared the income of an EMT-P to a RN quoting the participant's spouse, an EMT-P, who said, "'I'm still so dumbfounded about how much money you make [as an RN, compared to [self, as a] paramedic]'" (SP2, 1113 – 1115). Nevertheless, some participants also continued to work as EMT-Ps (see table 4.2). Some continued to work as EMT-Ps because of their retirement packages:

> …a lot of your fire departments and your EMS programs offer excellent benefits and retirement packages and pensions and state pensions and things like that, so a lot of guys or girls that go through nursing school will sometimes stay on a truck for quite some time and work in ICU or an E.R. or wherever and have their foot in the door at a hospital and kind of do both (SP7, 739-748).

During member checking, one participant said:

> The reason why I don't give up [working as an EMT-P] to be honest, is. . .my retirement. I don't stay here for the pain, I stay for the retirement. . . it would be dumb for me just to stop now and just go into a whole new career path (SP2, 134-136, 152-153, 616-619 MC).

The study participants also continued to maintain their EMT-P certifications and work as EMT-Ps so they could maintain their skills: "you always are going to hold onto that title [EMT-P] because it gave you a certain skillset that nobody else has unless you were an [EMT-P]" (SP2, MC 430-434).

Becoming a registered nurse did not always mean the participants left one profession for another. Although they received higher salaries as RNs, some continued to work as EMT-Ps so they could meet the pension or retirement requirements of EMT-Ps, or so they could maintain their EMT-P skills.

The participants talked at length about the difference in the focus of EMT-Ps compared to the focus of registered nurses. They commented that while EMT-Ps focus on caring for the patient in the short term, nurses focus on the patient in the here and now, but nurses also focus on the patient in the long-term. One participant said:

> You know, I like the critical thinking aspect [of nursing], having to think about the long-term effects of the treatments and stuff like that, you know? . . . being an EMT, it's just stabilize them, get them to the hospital and drop them off in the E.R. But for me, it was like, I'd like to see that longer term process and the thinking. And there seemed to be a lot more collaboration in the ICU. So I really fell in love with ICU (SP8, 284-297).

Another participant said:

> I think a lot of [EMT-Ps] kind of have the mentality like, 'Oh, this ain't nothing. We got this - bag them up and go.' And I think nursing is a little bit more detail-oriented where it's not just about the moment. 'Let's assess the entire patient and find out what they need, not just physically, but spiritually, emotionally (SP3, 84-92).

A third participant stated, "You can't approach someone [a patient] as a nurse the same way you would as an EMT or a medic" (SP6, 708-710). Another added:

> Being a registered nurse requires kind of a broader perspective. You have to think about more than just the immediate, short future . . .of your patient. You have to think about more than the here and now. You have to think about 'How do we help this patient and empower them so that they don't wind up in this situation again'"? (SP12, 713-721)

Study participants discussed the differences in patient care focus of EMT-Ps compared to nurses. While EMT-Ps focus on the patient's immediate, life threatening needs, nurses focus on the wholistic, long-term, needs of the patient.

Participants also identified working as a member of the health care team as a difference between being an EMT-P and a nurse. While several participants saw being a part of a team as an advantage of being a nurse, making the change can be complicated:

> I think the issue with [EMT-Ps] is it's very difficult for us to go from prehospital to in-hospital. It's very difficult to make that transition. As [an EMT-P], you work basically, almost solo. You may have a partner here and there, but you make decisions by yourself. And then when you go into the hospital [as a nurse], you

> have to work as a team and that can be very difficult to learn how to do" (SP5, 91-103).

Another participant had a different opinion about being part of a team:

> As a nurse, you are on your own. . .when I was on an engine [as an EMT -P], there would be three or four of us. So, I guess that's another thing that you have to get used to is as a nurse, you're on your own. While as an EMT, you're with a team all the time. Whenever you approach a patient, you're approaching them as a group and not as one person (SP6, 715-727).

The same participant also thought a nurse's perspective of team is different than that of an EMT-P, saying:

> I mean, they do tell you, 'Yes, we're a [health care] team, if you need me to help.' But I would say, like 90 percent of the time when you [as a nurse] go ask for help, there's no one around because they're off doing their own thing. There are plenty of times where I would stand there, [thinking], 'This is no team because when you need help, help's not here'(SP6, 739 – 744, 747-759).

This participant's experience was that although nurses, as members of the health care team, should be there to help each other, the participant did not find that support.

Some of the participants talked about the role of gender in the world of the EMT-P compared to that of a nurse. Despite their own gender, the participants described the necessity of adapting to the female-dominated environment of nursing after having been in a male-dominated environment as EMT-Ps. One participant said:

> There's no doubt about it. It's [EMT-P profession] probably seventy-five percent men. . . it's filled with men and usually those men are big and strong. . .it's

> definitely a different world working with women as opposed to working with a bunch of men. You have to be very politically correct [with women], and I have a very abrupt and very up-front and no-holds-barred kind of personality. I think that comes from being on the truck for so long. And so I had to learn how to tone myself down a little bit. . . One of my preceptors at the hospital told me to . . .be a little bit more prissy (SP9, 144-150, 213-225).

Although EMT-Ps carry out their job responsibilities with pre-written protocols, while caring for patients in the field they must make decisions about which protocols to apply and how depending on the patient's situation. Nurses, on the other hand, must have an order written by a medical doctor, advanced practice nurse, or physician assistant before they can implement procedures. One participant stated:

> Because it's - it's very clear when you're an EMT or medic working out in the field: you're just sent out to get a job done. You have all these protocols that are already laid out for you by the medical director . . . while as a nurse, you're always taught you have to go get permission for every single thing. Just like the medications: There are medications that you [EMT-P] could use and when you can use them, that was already laid out. You didn't have to ask permission or anything like that. It was already laid out for you. But as a nurse, it's like if you change something or give it without permission, you're outside your scope of practice and you could lose your license and you can get fired and you could possibly go to jail (SP6, 451-462, 490-501).

All of the study participants mentioned the nurse's need for an order before performing nursing tasks as a significant difference compared to being an EMT-P. One said, "That's probably the biggest thing, having to wait for those orders (SP2, 505). Another said:

> I think a lot of people [former EMT-Ps] have trouble taking orders. And a lot of people don't like that, especially if you're used to making decisions and making your own orders out in the field. That's a very hard lesson to learn. It really is (SP5, 116-124).

Another commented, "It's [nursing] the only profession where you're considered too stupid to give a Tylenol to somebody without orders (SP12, 633-636). A third participant described the ambiguity of the nurse's having to have orders for medications and procedures while at the same time being responsible for evaluating actions of other health care workers including physicians:

> And I have to catch the doctor's mistakes and you have to catch the pharmacy's mistakes and you're responsible for anything that goes wrong. Right? So, it's when you take people who are used to ultimately being accountable for their own decisions and then telling them you have to be accountable for everybody's mistakes, but you can't do anything until you're told you can. I mean, it's - it's a huge shock (SP12, 648-657).

The participants also pointed out differences in the scope of practice of an EMT-P compared to that of a nurse, particularly when it came to procedures EMT-Ps perform routinely:

> You know, part of it was just the limitations in your scope as a nurse. As an EMT intermediate, you're able to intubate. I've intubated a lot of patients. And when I was working [as a nurse] in the ICU and you see a physician struggling to intubate a patient, you just kind of want to knock them out of the way and say,

> ‘Let me do it!’ But I think it was just a difference in scope. You have a lot of autonomy when you're an EMT in the in the field, but you are limited in your scope of practice [as an RN] in the hospital. I think as an EMT, you make more decisions too, whereas a nurse, it's the physicians making the decisions (SP8, 132-144, 149 – 152).

It was not uncommon for the study participants to have been in situations as nurses where the patient’s condition was severe and/or deteriorating but as nurses they could not intervene although they had the skills as EMT-Ps that could have helped the patient. One participant changed jobs after such troubling experiences:

> I actually quit working in the ER ….. I just don’t like when stuff like that happens. I don’t like the feeling I could help this patient but I can’t. As a medic working in the hospital [as a nurse] you face those situations all the time. It makes you feel you are doing wrong; not doing right by the patient. Makes you feel your hands are tied. It does not happen often but as [an EMT-P who is working as an RN], you have to understand it’s not our fault it is that way (SP7, MC 341-351).

The participants had difficulty with the change of status of being a nurse compared to being an EMT-P. One participant described the change well when the participant commented:

> Yeah, as [an EMT-P] you're kind of top of the totem pole. You're making decisions by yourself. You're out there. You're saving lives, and then when you're in the hospital, you're bottom of the totem pole almost. All these doctors are telling you what to do and the patients are yelling at you and the nurses are ahead of you like everyone else is on top of you, and it's just it's hard to go from top to

> bottom. It really is. Just because you have doors, you know, you're prehospital, you're on top of the world, you go inside and you're not. And so that's a very hard adjustment (SP5 – 301 – 317).

Study participants discussed disliking certain situations they would find themselves as nurses with EMT-P skills. They mentioned the inability to be able to act in a patient's best interest as they had to wait for the doctor or the doctor's orders. The participants mentioned the uncomfortable feeling of not being able to act implementing potentially lifesaving measures because they were nurses working in the hospital without doctor's orders. Whereas, if the same patient was in the field and needed their assistance, and they were working as EMT-Ps, they could intervene and implement potentially life-saving protocols.

The participants had come to terms with the differences between being an EMT-P and a nurse so when they were functioning as nurses, they were able to do so. One participant said:

> At some point, all these things have to get done. Nursing works complementary to medicine, right? I mean, the docs or the nurses or - or whoever can write these orders [but] somebody has to get the stuff done and somebody has to be there with the patient at the bedside and make sure that it all gets done. So, yeah, I quickly figured out when I was working as a nurse why these systems are in place and why the nursing profession is the way it is the way it is. But it's hard to see that when you don't know what you don't know" (SP12, 332 – 344).

Some of the participants found ways to work with the restrictions in their scope of practice:

> You have to protect your license. With that comes staying within the scope and doing what is best for you in your career within the lines of what the hospital and nursing licenses asks of you even though you may not agree with it all or struggle

> with those decisions [but] there is always a way around it. You make the right phone calls, get the right person in the room to do the best you can with what you got (SP7, MC, 391-401).

Study participants stated they did what they had to do to become nurses and once licensed they operated within their scope of practice to ensure they could maintain their license. All of the study participants were working in the field of nursing although there were some things they felt they had to give up. The participants mentioned having to give up some of their autonomy in decision making as EMT-Ps had protocols, they had to wait for doctors' orders and in some cases, they were not allowed to implement lifesaving skills which could potentially impact the patient's quality of life and long-term outcomes.

In summary, "Coming to Terms with Being a Nurse" reflects the study participants' process of adapting to being registered nurses who also had been, or continue to practice as, Emergency Medical Technicians or Paramedics (EMT-Ps). While nursing gave the study participants additional financial stability, increased their knowledge, and provided more career opportunities and safety, the study participants struggled with differences in the two roles. Nursing required the study participants to be a member of the healthcare team, while EMT-Ps function alone or with one or two other people for support. Nursing forced the participants to learn to function in a female dominated environment, while EMT-Ps work in a male-dominated environment. The study participants had difficulties with the requirement that nurses have doctors' orders before intervening with their patients. In comparison, EMT-Ps make independent patient care decisions based on protocols. Some study participants also encountered situations where the nurse's scope of practice prohibited their intervening with patients in dire

circumstances. Had they been caring for the same patient in the role of an EMT-P, they could have intervened and could have mitigated the situation, potentially also saving the patient's life.

The study participants also had to change their perception of themselves in their role as a nurse. As EMT-Ps, they often saw themselves, and were seen by members of the public, as heroes; one participant called this feeling like they were "the top of the totem pole." As nurses, they saw themselves as being one of many members of the healthcare team. Nevertheless, each of the study participants had learned how to integrate their self-identification as EMT-P with their self-identification as registered nurses, a process that was somewhat unique to each participant. Factors that appeared to influence the participant's identification with one role compared to the other seemed to be affected by the length of time they had been practicing as nurses and whether they had sought additional education in nursing.

Chapter 5 Conclusion, Discussion, Recommendations

INTRODUCTION

This research study used Naturalistic Inquiry (NI) (Erlandson et al., 1993; Lincoln & Guba, 1985) to explore the experiences of Emergency Medical Technicians and Paramedics (EMT-Ps) who become registered nurses. Chapter Five presents an overview and discussion of the study beginning with the statement of the problem and methodology used to explore the phenomenon of interest, followed by an interpretation of the study findings. The study results are then compared to extant literature. The Chapter presents implications for nursing education and implications for nursing and healthcare, as well as strengths and limitations, suggestions for future research. and conclusions.

STATEMENT OF THE PROBLEM

The success of institutions of higher learning depends on the outcomes of the students who matriculate into the programs they offer. Nursing is considered a difficult program because of the rigor, critical thinking, and testing required to excel. To promote student success, nursing program administrators must ensure the students accepted into their programs are qualified based on their previous course work, grade point average, preparatory exam outcomes and personal qualities.

Once a student is accepted into a nursing program, nurse educators are challenged to promote the success of their nursing students. This researcher, a nurse educator, became concerned about the attrition rate for Emergency Medical Technicians and Paramedics (EMT-Ps) who entered nursing school . She observed qualified EMT-Ps embark on their nursing education and spend a great deal of time, energy, and money, only to fail to reach their goal of completing their nursing program and becoming registered nurses. The researcher turned to the

literature seeking information that could help ameliorate the problem but was unable to find answers. The dearth of literature addressing issues and needs of EMT-Ps who set out to become registered nurses stimulated the researcher to conduct this research study whose purpose was to explore the experiences of EMT-Ps who become registered nurses.

REVIEW OF METHODOLOGY

This qualitative Naturalistic Inquiry (NI) study was based on the work of Lincoln & Guba (1985) and extrapolated by Erlandson et. al, (1993) and addressed the research question: What is the experience of Emergency Medical Technicians and Paramedics (EMT-Ps) who become registered nurses? Lincoln & Guba say NI attempts to describe, understand, and/or interpret daily life experiences within a particular context. A major assumption of Naturalistic Inquiry is that human beings construct knowledge rather than discover knowledge. The researcher who is using NI is the primary data collection instrument, and therefore is responsible for collecting, recording, analyzing, and writing up study findings (Erlandson et al., 1993). Once the study and its procedures were approved by the University of Texas Medical Branch Institutional Review Board, purposive and snowball sampling was used to recruit study participants. The study participants self-identified as either male or female; they represented a variety of EMT-P preparations, ages, and basic nursing programs and additional nursing education (see Table 4.1). Ten of the 12 participants were residing in Texas, one in Alaska, and one in Florida. All of the twelve study participants were registered nurses at the time of data collection. Eleven participants were working as registered nurses in a variety of capacities; the remaining participant was not working in order to be seek higher education in nursing (see Table 4.2). The participants held a wide variety of certifications, both as EMT-Ps and as nurses (see Table 4.3).

Study data consisted of demographic and interview data as well as the researcher's notes and journals. Data was collected and recorded using online technology (Zoom). The recorded interviews were transcribed by Trint ®. Data analysis was utilized Lincoln and Guba's (1985) approach, which consisted of unitizing the data, negative case analysis, and identification and designation of emerging categories. Trustworthiness of the study and its procedures met Lincoln and Guba's four criteria of trustworthiness were maintained using credibility, transferability, confirmability, and dependability. Data analysis revealed that the study participants were motivated to become nurses for a variety of personal and professional reasons: Their experiences while in nursing school helped them understand how to think and behave like nurses; and although nursing helped the participants meet the goals that had led them to become nurses, they continued to struggle with differences in the environment of nursing compared to the environment of the EMT-P.

Data analysis utilized Lincoln and Guba's (1985) approach, which consists of unitizing the data, negative case analysis, and identification and designation of emerging categories. The study met Lincoln and Guba's four criteria of trustworthiness: credibility, transferability, confirmability, and dependability.

INTERPRETATION OF THE FINDINGS

This Naturalistic Inquiry (Lincoln & Guba, 1985, Erlandson et al.,1993) study explored the experiences of Emergency Medical Technicians and Paramedics (EMT-Ps) who became registered nurses by asking the research question, "What are the experiences of EMT-Ps who become registered nurses?" The research question allowed the study participants to share information about their motivations for becoming nurses, how nursing helped them meet their desire to expand and/or broaden their knowledge, to work in a safer workplace and to earn more

money. Nursing offered better career opportunities, upward mobility, and advancement. opportunities as well as the ability to learn and experience more in patient care.

The period of time when the study participants were in nursing school was important in helping the study participants understand the differences in how EMT-Ps think and act compared to nurses, and how to adapt their own behaviors in order to be successful in nursing school. The study participants were, for the most part, complimentary about their nursing school's curricula; they appreciated the coordination of didactic and clinical experiences and the opportunities to interact with clinical nursing faculty who were experts in their particular specialty area. Participants who attended Bridge Track (BT) nursing programs had a variety of experiences. The data revealed that some BTs did not accelerate the EMT-Ps' progress through the nursing program, and the BTs often made the BT students feel isolated and different from the traditional students in their class cohort. The study participants encountered nursing faculty members who did not understand, and did not appreciate or respect, the skills and knowledge EMT-Ps bring with them to nursing school. Instead, the EMT-Ps' comments indicated the nursing faculty perceived them as arrogant during classroom or clinical discussions.

Although nursing offered the opportunities that had motivated the study participants to become nurses, they also encountered difficulties when functioning as nurses within the healthcare team. The nursing environment was quite different from what they had experienced as EMT-Ps. Some of those differences included having to adapt to a female-dominated environment, and the relative status of nurses as members of the healthcare team compared to the how EMT-P are seen in their practice, where EMT-Ps often are seen as heroes because their focus is on emergent/urgent patient care needs. All of the study participants struggled with the requirement that nurses must have an order from a physician, physician's assistant, or nurse

practitioner before implementing any sort of treatment to the patient. The participants also were troubled when patient's needs required interventions they, as EMT-Ps, were quite capable of performing, but they were not allowed to perform because of their nursing scope of practice. As nurses, they also were uncomfortable with other healthcare providers' performance of such skills as they were less adept, than if they could have performed them.

Although some of the study participants continued to work as EMT-Ps, as well as nurses, and some continued to maintain their EMT-P certification, all of the study participants continued to see themselves as EMT-Ps and as nurses. Their perception of self and nurse *vs* as EMT-P appeared to be affected by the role in which they were working at the time, the length of time they had been working solely as nurses, and whether they had sought additional education and career advancement as nurses.

COMPARISON TO EXTANT LITERATURE

There is a dearth of literature exploring the experiences of EMTs and paramedics (EMT-Ps) who become registered nurses. To date, no literature has been identified that addresses this phenomenon. The literature that currently exists regarding EMT-Ps and nursing provides information on the value of EMT-Ps to nursing (Henderson, 2009), the character attributes and skill sets EMT-Ps can bring to nursing (Whetzel & Wagner, 2008), and reasons why EMT-Ps are interested in becoming nurses (Nurse.org, 2021, para. 10). As a result, a great deal of the current study's findings are new, offering new insights into the experiences of EMT-Ps who become registered nurses. The study findings provide new perspectives about why EMT-Ps become registered nurses, the differences in the mindsets of nurses and EMT-Ps and the necessity for EMT-Ps to adapt to the different mindset in order to become registered nurses, and an understanding of the self-identity of EMT-Ps who become nurses.

The current study supports the premise that EMT-Ps become registered nurses for several reasons. Study participants wanted to advance their own knowledge; either their general knowledge, or their knowledge about what happened to their patients after they, as EMT-Ps, had transported them to the hospital. Participants also became nurses because of concerns about their own physical or psychological safety. Study participants became nurses because it helped them to fulfill a life-long dream and provided increased earning potential and career advancement in comparison to being an EMT-P.

The EMT-Ps had difficulty adapting to thinking like a nurse. The process of modifying their thinking, from that of an EMT-P to that of a nurse, occurred while in nursing school, when they first recognized and embraced the need to change their thinking. The participants were complimentary about the sequencing of their nursing school courses, their clinical experiences, and having faculty members who taught courses within their specialty area. Participants whose nursing schools had Bridge Tracks (BTs) reported a lot of variation in the BTs and believed the BTs did not always meet the goal of BTs; that of being a shorter nursing school program for EMTs and paramedics. Many of the study participants encountered nursing faculty members who tended to dismiss, disregard, and disrespect their EMT-P nursing students, failing to recognize that as adult learners, EMT-P students had knowledge, skills, and experiences that were different from those of generic nursing students. As a result, the EMT-Ps who became nurses believed that some nursing faculty members misunderstood and undervalued their EMT-P students.

The study findings also helped to understand how EMT-Ps who become registered nurses identify themselves. Although all study participants were registered nurses at the time of data collection, some saw their primary role as EMT-Ps who had become registered nurses. While

others saw their primary role as registered nurses who also were EMT-Ps, and other participants viewed their roles equally as EMT-Ps and registered nurses. In the latter instance, neither role had a priority over the other. Therefore, the study findings revealed participants did not shed their identity as EMTs or paramedics once they become nurses. Instead, they self-identified based on the role in which they were working at the time, or the role they believed was of most value at the time.

The study participants continued to struggle with the differences in their roles as EMT-Ps and the role of nurse once they began to practice as registered nurses. They had to deal with differences in culture and work milieu. Every participant struggled with the need for physician's orders before they could implement interventions on behalf of their patients. They encountered ethical dilemmas when they were working as registered nurses and were not able to intervene with patients who were in life-threatening situations, needing the life-saving skills they were capable of performing but their license as registered nurses prohibited their performing.

IMPLICATIONS FOR NURSING EDUCATION

Nursing educators have the task of creating effective learning environments for all students. Although some faculty may find educating EMT-Ps challenging, it is important for educators to ensure all nursing students feel respected and valued. EMT-Ps should be provided opportunities for their previous learning experiences to be shared to promote inclusivity and active engagement that promotes learning. This study also highlighted the emotional fortitude required for an EMT-P to become a registered nurse. Participants expressed the need for inclusive and integrated learning environments. To cope with the environment, some study participants stated they shut down as they felt separate and different. Therefore, it is essential to implement the development of best practices for educating future EMT-Ps desiring to become

registered nurses. Nursing program administrators may provide professional development opportunities to assist faculty with effective communication and teaching approaches that promote a welcoming and accepting environment for EMT-P nursing students.

Nursing program administrators and educators must also consider ways to ensure Bridge Track programs consistently offer shorter, accelerated education options for those such as EMT-Ps with previous health care experience. This was not the case for some of the EMT-Ps who participated in this study. BTs programs should provide a "bridge" into nursing that does not separate the students but help them to socialize into being nurses. The study findings may be useful in assisting nursing program administrators and faculty to create a curriculum that allows the EMT-P to become a nurse in an accelerated fashion considering their previous health care experience.

IMPLICATIONS FOR NURSING AND HEALTH CARE

The study provides significant contributions to literature as it opens the topic of the needs, experiences, and dilemmas of EMT-Ps who become registered nurses. Although there is a small percentage of EMT-Ps who become nurses, they bring strengths to nursing. They are one recruitment source that can add to the population of nurses thereby assisting with mitigating the shortage. In addition to the research question, more information was revealed about the identification of the EMT-P who becomes a nurse . However, when considering EMT-Ps who become registered nurses, one of the biggest implications of health care, from this study, is the need to assess the skills the EMT-P nursing students bring into the nursing role and how to make better use of their previous knowledge. Currently, some of the skills EMT-Ps possess are not within the nursing scope of practice. Thereby posing an ethical dilemma they face when not allowed to implement life-saving interventions to patients in need. Therefore, there may be a

need to create policies and procedures to best integrate the EMT-Ps skills and knowledge with nursing skills and knowledge to decrease or alleviate potential ethical concerns when providing nursing care.

STRENGTHS

This study had several strengths. Despite repeated searches of the literature, no studies were identified that address the experiences of EMT-Ps who become registered nurses, making this the first study to do so. Findings of the study may add to extant literature by giving voice to this population, allowing them to share details about their experiences as EMT-Ps who became registered nurses. The study was strengthened by the participant demographics, which included a broad age range (29-51), educational levels (Associate Degree Nurses to doctorally-prepared nurses), and a balance of males and females (6 males and 6 females).

The study revealed important information about participants' experiences as nursing students. They shared information about the challenges of learning the differences between the role of the registered nurse and the EMT-P. Although the participants mostly found their nursing school didactic and clinical experiences well organized and they appreciated being taught by experts in the clinical specialties, many encountered individual nursing faculty members who did not respect the skills and knowledge their EMT-P nursing students brought to the learning environment and did not welcome their contributions to classroom or clinical discussions.

The findings also revealed the lack of consistency among Bridge Track (BT)programs. Although BTs purport to shorten the length of time specific groups of students (EMT-Ps, LVNs, and LPNs) by providing a "bridging" between the knowledge and skills BT students had acquired in their previous jobs, some found their nursing school experiences longer. Moreover,

some of the participants thought the BTs made them feel isolated and different from the remainder of their nursing class cohort, potentially inhibiting their socialization into nursing.

An unexpected finding of the study, which also was a strength of using exploratory approach of Naturalistic Inquiry, was the struggles encountered by the study participants after they became registered nurses.

LIMITATIONS

As with any qualitative study, there are some inherent limitations related to methodology such as sample size, and specific population of participants (EMT-Ps) and . Like most qualitative studies, a limitation of the present study was the number of study participants, although data analysis revealed saturation and redundancy of the study categories. There was a lack of racial/ethnic diversity in the study population: ten of the twelve participants were Caucasian. The study was also limited in the geographic locations of the participants, ten of the twelve resided in Texas, one participant lived in Alaska and another in Florida. An additional limitation of the study was that all of the participants had completed nursing school and were working as EMT-Ps and/or nurses. Finally, although it was not the intent of the study, no participants were recruited who had dropped out of, or were unsuccessful in, nursing school.

RECOMMENDATIONS FOR FUTURE RESEARCH

This study was the first to explore the experiences of EMT-Ps who become registered nurses. Future research studies should strive to recruit a more diverse sample as well as those who live outside of the state of Texas. Future research should also explore the experiences of EMT-Ps who were not successful in becoming nurses. Finally, future research could also include the faculty perspective of educating EMT-Ps.

CONCLUSIONS

EMT-Ps are knowledgeable and skilled health care providers who often provide life sustaining treatments in the field with minimal support. Although, they have a wealth of health care/medical knowledge, several find it difficult to become nurses. This study provided an opportunity for EMT-Ps to share their experiences. These experiences should provide nursing program administrators with valuable knowledge to promote a welcoming learning environment for EMT-Ps. As more EMT-Ps are able to successfully complete nursing school, pass the national licensure exam and enter the workforce, they may be one source of mitigating the nursing shortage.

Appendices

Appendix A
UTMB IRB Approval to Conduct Research

Institutional Review Board
301 University Blvd.
Galveston, TX 77555-0158
Submission Pag e

11-Mar-2021

MEMORANDUM

TO: Shiela Ford
Grad School Biomedical Science GSBS9999

FROM: Dwight Wolf, MD
Chairman, IRB

RE: Final Approval of Continuing Review

IRB #: IRB # 20-0304

Submission Number:20-0304.004

TITLE: The Experiences of Emergency Medical Technicians and Paramedics who Become Registered Nurses: A Naturalistic Inquiry

DOCUMENTS: Protocol Version 2, 03/04/2021
IRB Fast Facts (Clean)
Consent Narrative
Form to Document Consent
Demographic Data Sheet
Interview Guide
Recruitment Flyer

The UTMB Institutional Review Board (IRB) reviewed the above-referenced research protocol via an expedited review procedure on **09-Mar-2021** in accordance with 45 CFR 46.110(a)-(b)(1). Having met all applicable requirements, the research protocol is approved. The approval for this research protocol begins on **11-Mar-2021**. Continuing Review for this protocol is not required, as outlined in 45 CFR 46.109.

The Principal Investigator is still responsible for:

- Submitting amendments for protocol changes.
- Reporting Adverse Events, Protocol Violations, and Unanticipated Problems, as outlined in IRB policies and procedures.
- Closing the project once it ends, or when personal identifiers are removed from the data/biospecimens and all codes and keys are destroyed.

If you have any questions, please do not hesitate to contact the IRB office via email at IRB@utmb.edu.

Comments: The requirement to document written informed consent is waived in accordance with 45 CFR 46.117(c).

Institutional Review Board
301 University Blvd.
Galveston, TX 77555-0158
Submission Page

23-Jun-2021

MEMORANDUM

TO: Shiela Ford
Grad School Biomedical Science GSBS9999

FROM: Dwight Wolf, MD
Chairman, IRB

RE: Amendment/Miscellaneous Request Approval

IRB #: IRB # 20-0304

Submission Number: 20-0304.008

TITLE: The Experiences of Emergency Medical Technicians and Paramedics who Become Registered Nurses: A Naturalistic Inquiry

DOCUMENTS: Revised Protocol Version 3, 5/17/2021

The **Protocol/Consent Form Changes Response** request to the above referenced study has been reviewed via an expedited review procedure on **19-May-2021** and approved by the UTMB Institutional Review Board (IRB) in accordance with 45 CFR 46.110(a)-(b)(2).

The approval period for this modified research protocol begins on **23-Jun-2021**. Amendment approvals do not change the approval period of the protocol. Therefore, the expiration date will remain the same as was determined for the protocol at the time of initial or continuing review.

If you have any questions, please do not hesitate to contact the IRB office via email at IRB@utmb.edu.

Description of Changes/Submission

The protocol has been revised to update Section 9, Recruitment Methods and Consenting Process, to state that the researcher, participants and individuals who not did meet the inclusion/exclusion criteria will post the flyer on their social media as part of the "snowball sampling". The change was made per request of research participants.

Appendix B
Recruitment Flyer

EMTs or Paramedics Who Become Registered Nurses

I am interested in the experiences of EMTs or Paramedics who become Registered Nurses

Participants should have graduated from a nursing program or be a current nursing student

Data collection will involve face-to-face or online video teleconference interviews

For more information about the study or to volunteer, contact Shiela R. Ford at srford@utmb.edu

Appendix C
Fast Facts

utmb Health

FAST FACT SHEET **IRB#: 20-0304**

Study Name: The Experiences of Emergency Medical Technicians and Paramedics who Become Registered Nurses: A Naturalistic Inquiry

Contact Information:
Principal Investigator: Shiela Ford Phone: 281-781-3578

Dissertation Chair: Dr. Carolyn Phillips Phone: 709-772-8234

What is the purpose of this research study? The purpose of this proposed Naturalistic Inquiry study is to explore the experiences of Emergency Medical Technician-Paramedics EMTs and Paramedics who are graduates of or students in an Associate Degree nursing program.

What are the Research Procedures? If you consent to participate, the Principal Investigator will conduct an initial interview with you either in-person, by phone, or by using a web-based software, that will last no more than 90 minutes. All interviews will be audio recorded. You can decline to answer any question. Should the interview appear to require more than the designated 90 minutes, the investigator will ask you whether you are willing to extend the time, end the session, or schedule another meeting. During the initial interview, the investigator will ask you if she may follow-up with you via your phone number provided after the initial interview to clarify any information or ask additional information as needed. You may refuse to be re-contacted.

What are the Risks and Benefits? Potential risks of participation in the study include interview fatigue, emotional discomfort, and potential for loss of confidentiality. You may experience fatigue through the interview process. Emotional discomfort can occur due to discussion of sensitive subject matter and recollection of workplace violence. You or the Principal Investigator may request that the interview be paused or stopped at any time if you experience interview fatigue or emotional discomfort. If needed, the principal investigator may discuss potential resources that would be helpful for your emotional discomfort, including religious organizations, local counselors, employment resources, and mental health organizations. Any time information is collected; there is a potential risk for loss of confidentiality. Every effort will be made to keep your information confidential; however, this cannot be guaranteed.

Costs and Compensation: There will be no costs other than your time, fuel costs to meet at physical location, or potential use of data allowances for web-based or phone meetings. There will be no reimbursement for participation in this study.

How will my information be protected? All results obtained in this study will be kept confidential and only available to the research study team. To protect privacy and anonymity, a Participant ID will be used instead of your name and any information that could potentially be used to identify the participant will be removed or masked. All research data will be maintained in a secured location.

Who can I contact with questions about this research study? This study has been approved by the UTMB Institutional Review Board (IRB). If you have any complaints, concerns, input or questions regarding your rights as a subject participating in this research study or you would like more information about the protection of human subjects in research, you may contact the IRB Office, at (409) 266-9400 or irb@utmb.edu..

For questions about the study, contact Shiela Ford at the numbers listed above.

Before you agree to participate, make sure you have read (or been read) the information provided above; your questions have been answered to your satisfaction; you have been informed that your participation is voluntary, and you have freely decided to participate in this research.

This form is yours to keep.

Appendix D
Narrative for Obtaining Verbal Consent

You are being asked to participate in my research study exploring the experiences of Emergency Medical Technicians and Paramedics EMTs and Paramedics who become registered nurses. You have identified yourself as an EMT or Paramedic who is a registered nurse or are in nursing school. This research is being conducted as a part of my course of study as a PhD program student at the University of Texas Medical Branch at Galveston, Texas.

There are some risks in participating in this research study although they are minor. There could be a loss of confidentiality of the information you provide, and you might become fatigued or emotionally distressed thinking about the questions. In an effort to protect the privacy of your information, I will assign you a participant ID that will be used instead of your name. All information that could personally identify you will be removed or masked. If you become fatigued or emotionally distressed during the interview, I will pause and ask you if you wish to continue. You are free to stop participating at any point and for any reason without consequence.

I will ask you for some demographic information and will ask you questions about your experiences as an EMT or paramedic who became a registered nurse or is in nursing school. I do not anticipate this interview will go over 90 minutes, but I might ask you to participate in up to two follow-up interviews. The follow-up interviews should not last more than thirty minutes. You may stop the interview and completely withdraw from the study at any time. You also may refuse to answer any question posed in this study.

There are some potential benefits that could arise from this research. These may include enhanced knowledge about the experiences of EMT-Ps who become registered nurses or are in nursing school. There is no reimbursement for your participation in the proposed study. There is no cost for participating.

Do you have any questions for me regarding the research study or your participation? *(Researcher will pause and answer any questions that are posed. Once the questions are answered, the researcher can proceed to the next question).*

Are you willing to participate in this study? If you confirm study participation, you agree that I can now turn on the recording device to begin the data collection. (*Once confirmation to participate in the study is received, the researcher will turn on the recording device).* Please state your full name. Are you willing to participate in this research study exploring the experiences of Emergency Medical Technicians and Paramedics EMTs and Paramedics who become registered nurses? *(Once the participant verbally agrees to participate in the research study, the interview will begin).*

Appendix E
Demographic Data

Participant Code: _____

Demographic Information:

1. Age:
2. Gender:
3. What certification best describes your EMT-P certificate?

Licensed Paramedic EMT-P Advanced EMT EMT Basic Emergency Care Attendant

4. What certifications are you currently maintaining?
5. What degrees have you completed since high school?
6. What type of nursing program are you or did you attend? (*circle type of program)*

BSN program A.D.N. program

7. When did you graduate or expect to graduate? _____
8. Where do you work? _____
9. If you are a RN, in what type of a unit are you currently employed?
10. What plans do you have to further your education?
11. If so, what degree do you plan to earn_____ and when _____?

Appendix F
Interview Guide

Participant Code: _____
Date: _____
Beginning Time: _____
End Time: _____

Grand Tour Question:
We have discussed the purpose of the research study and my interest in learning of your perceptions and experiences as a paramedic nursing student transitioning into the role of the professional nurse. Please tell me about your nursing school experience.

Probing Questions (Topical):

- Why did you decide to become a registered nurse?
- What were some of the challenges you encountered?
- What academic or financial resources were available to you as a nursing student?
- Which academic or financial resources were specific to EMT-Paramedic students?
- What did you find was done well in your nursing program?
- What do you think could have been done to make your nursing school experience easier?
- What things about nursing school did you find more difficult for you as an EMT-Paramedic becoming a nurse?
- Can you tell me about your relationship with nursing faculty?
- What else should I have asked you about your experiences as an EMT-Paramedic becoming a registered nurse?
- Would you be willing to be contacted again if I have further questions or need clarification?

If you have other thoughts you would like to share with me, you can contact me by using my email address: srford@utmb.edu

American Association of Colleges of Nursing. 2020. *Fact Sheet: Nursing shortage*. Retrieved November 20, 2021 from: https://www.aacnnursing.org/news-information/fact-sheets/nursing-shortage

American Association of Colleges of Nursing. 2020. *Fact Sheet: Nursing faculty shortage* Retrieved November 18, 2020 from: https://www.aacnnursing.org/news-information/ fact-sheets/nursing-faculty-shortage

American Nurses Association. 2017. *Workforce*. Retrieved November 18, 2021 from: http://www.nursingworld.org/practice-policy/workforce.

Beck, C. T., (1993). Qualitative Research: The evaluation of its credibility, fittingness, and auditability. *Western Journal of Nursing Research, 15* (263-266).

Budden, J. S., Zhong, E. H., Moulton, P., & Cimiotti, J. P. (2013). *Highlights of the national workforce survey of registered nurses*. Retrieved November 18, 2021 from: https://www.ncsbn.org/4399.htm

Cohen, D. J. & Crabtree, B. F. (2008). Evaluative criteria for qualitative research in health care: Controversies and recommendations. *Annals of Family Medicine, 6* (4), 331-339.

Cohen, D. J. & Crabtree, B. F. (2006). *Qualitative research guidelines project.* Retrieved October 17, 2017 from: http://www.qualres.org/HomeGrou-3589.html

Creswell, J. W. (2007). *Qualitative inquiry & research design: Choosing among five approaches.* Thousand Oaks. CA: Sage.

Erlandson D. A., Harris, E. L., Skipper, B. L. & Allen, S. D. (1993). *Doing naturalistic inquiry: A guide to methods.* Newbury. CA: Sage.

Geiger-Brown, J., & Trinkoff, A. M., (2010. Is it time to pull the plug on 12-hour shifts? Part I: The evidence. *The Journal of Nursing Administration*, Mar 40(3), 100-102

Given, L. (2008). *The Sage encyclopedia of qualitative research methods.* Newbury. CA: Sage

Glasser, B. G. & Strauss, A. L. (1967). *The discovery of grounded theory: Strategies for qualitative research.* Chicago: Aldine

Guest, G., Bunce, A., & Johnson, L. (2006). How many interviews are enough? An experiment with data saturation and variability. *Field Methods*, 18(1), 59-82. doi:10.1177/1525822X05279903

Haddad, L. M., Annamaraju, P., & Toney-Butler, T. J. (2021). *Nursing shortage*. Treasure Island. FL: StatPearls

Halloway, I. (1997). *Basic concepts for qualitative research*. London: Blackwell Science

Henderson, E., (2009). EMT-Paramedics in the emergency department setting: A Perspective on the value of the EMT-Paramedic to patient care outcomes in the emergency department, *Journal of Emergency Nursing, 35*(6), 501-503

Hughes, B. (2010). *New Calhoun program allows paramedics to earn RN degree*. Retrieved from: https://www.decaturdaily.com/paramedics-can-earn-rn-degree-with-calhoun-program/article_255c1579-1498-51e8-89fc-c4c7478e3a93.html

Jacobs, R. L., (1985). Naturalistic inquiry and qualitative methods: Implications for training and development. Training and Development Research Report. Retrieved from: https://eric.ed.gov/?id=ED305518

Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic inquiry.* Newbury Park, CA: Sage

Morse, J. M. & Richards, L. (2002). *Read me first: A user's guide to qualitative research.* Thousand Oaks, CA: Sage

Nurse.org Staff. 2021. *The ultimate guide to paramedic to RN bridge programs*. Retrieved November 21, 2021 from: https://nurse.org/education/paramedic-to-rn/

Oglesby, R. (2007). Recruitment and retention benefits of EMT-Paramedic utilization during ED nursing shortages, *Journal of Emergency Medicine, 33*(1), 21-25

Paramedics make good nurses. 2016. Retrieved October 17, 2016 from: http://www.publicsafetydegrees.com/articles/ems/paramedic-good-nurse.php

Phillips, J., Malliaris, A. P., & Bakerjian, D., (2021). *Nursing and Patient Safety*. Retrieved November 18, 2021 from: https://psnet.ahrq.gov/primer/nursing-and-patient-safety

Polit, D. F., & Beck, C. T. (2014). *Essentials of nursing research: Appraising evidence for nursing practice* (8th ed.). Philadelphia, PA: Lippincott, Williams & Wilkins.

Powers, D. W., (2004). EMT-paramedic: A different type of nurse. *Emergency Medical Services, 33*(2), 32 - 34

Scott, L. D., Arslanian-Engoren, C., & Engoren, M. C. (2014). Association of sleep and fatigue with decision regret among critical care nurses. *American Journal of Critical Care Nurses,* Jan 23(1), 13-23

Spurlock Jr., D., (2020). The nursing shortage and the future of nursing education is in our hands. Journal of Nursing Education, 59(6), 303-304

Steubert, H. J., & Carpenter, D. R. (2011). *Qualitative research in nursing: Advancing the humanistic imperative* (5th ed.). Philadelphia, PA: Wolters Kluwer Lippincott, Williams & Wilkins.

Texas Board of Nursing. 2017. *Texas approved professional nursing education programs.* Retrieved November 20, 2021 from https://www.bon.texas.gov/pdfs/education_pdfs/education_programs/ApprovedRNschools.pdf

Texas Health and Human Services/Texas Department of State Health Services. 2017. *Initial Licensure/Certification.* Retrieved October 15, 2017 from: dshs.texas.gov/emstrauma Systems/certinfo.shtm

Texas Workforce Commission. 2017. Retrieved October 15, 2017 from http://www.twc.state.tx.us/

The 2021 American Nursing Shortage: *A data study*. 2021. Retrieved November 18, 2021 from: https://www.usa.edu/blog/nursing-shortage/

Tower, M., Cooke, M., Watson, B., Buys, N., Wilson, K. (2015). Exploring the transition experiences of students entering into preregistration nursing degree programs with previous professional nursing qualifications: An integrative review. *Journal of Clinical Nursing, 24,* 1174 – 1188. doi: 10.1111/jocn.12756

United States Bureau of Labor Statistics. (2017). *Occupational outlook handbook: Registered Nurses.* Retrieved from: https://www.bls.gov/ooh/healthcare/registered-nurses.htm

United States Bureau of Labor Statistics. (2015). *News release Bureau of Labor Statistics U.S. Department of Labor employment projections.* Retrieved from: https://www.bls.gov/news.release/pdf/ecopro.pdf

Whetzel, E. A., Wagner, L. K. (2008). Transitioning paramedics into emergency nurses: A unique population of new nurses. *Journal of Emergency Nurses, 34* (2), 154 – 155. Doi: 10.1016/j.jen.2008.01.003

VITA

Shiela Renee Ford, MSN-Ed, RNC

Born April 26, 1967, in Chicago, Illinois

Parents are Charlie and Louise Eubanks

Email address: srford@utmb.edu; phone: 281-781-3578

Professional Work Experience: Coordinator of Clinical Education, San Jacinto College

Education

A.D.N., December 1993, Kennedy King College, Chicago, Illinois

B.S.N., May 2002, St. Xavier University, Oaklawn, Illinois

MSN-Ed, November 2009, University of Phoenix, Phoenix, Arizona

Published

2013 – Dr. Karen Alexander & Shiela R. Ford, MSN-Ed, RNC - "Integrating Change for Positive A.D.N. Program Outcomes" Poster Presentation – Reno, NV

2004 – Andrei V. Alexandrov, Carlos A. Molina, James C. Grotta, Zsolt Garami, Shiela R. Ford, Jose Alvarez-Savin, Joan Montaner, Maher Saqqur, Andrew M. Demchuk, Lemuel A. Moye, Micheal D. Hill, Anne W. Wojner, CLOTBUST Investigators, Ultrasound – enhanced systemic thrombolysis for acute ischmic stroke, New England Journal of Medicine, 351 (21), 2170-8

Summary of Dissertation

The United States has been faced with a nursing shortage for many decades (ANA, 2017). The increasing age of nursing faculty, the aging population, and retirement of bedside nurses further diminish the nursing workforce in the United States (ANA). One potential nursing recruitment source is Emergency Medical Technicians and Paramedics (EMT-P). EMT-Ps can bring important skills and knowledge to nursing. Concern about attrition of EMT-Ps from pre-licensure nursing programs and the dearth of literature about EMT-Ps who are interested in becoming registered nurses led to this Naturalistic Inquiry study (Lincoln & Guba, 1985;

Erlandson et al., 1993) that explored the experiences of EMT-Ps who become registered nurses. Twelve EMT-Ps who were registered nurses at the time of data collection participated in the study. Data consisted of demographic and interview data as well as the researcher's observations. Study findings highlighted EMT-Ps' motivations for becoming a nurse, the challenge of adapting to a nurse mindset, and the process of coming to terms with being a nurse. The study findings also provided information about how the EMT-P who became nurses identified themselves and as some of the ethical dilemmas they face being EMT-Ps who are practicing as nurses.

CURRICULUM VITAE

NAME: Shiela R. Ford DATE: 2/21/2022

PRESENT POSITION AND ADDRESS: Coordinator of Clinical Education, San Jacinto College
8060 Spencer Road, Pasadena, Texas 77505

BIOGRAPHICAL: April 26, 1967, Chicago, Illinois, US Citizen
0409 South Peoria Street

EDUCATION: March 2008 - November 2009, Nursing, MSN-Ed, University of Phoenix

August 1995 – May 2002, Nursing, B.S.N., St. Xavier University

August 1991 - December 1993, Nursing, A.D.N. Kennedy King College

PROFESSIONAL AND TEACHING EXPERIENCE:

January 2006 – November 2006, Adjunct Nursing Professor, Central Texas College

February 2009 – June 2010, Instructor, The Nurse Aide Academy

January 2007 – May 2010, Vocational Nursing Faculty, San Jacinto College

June 2010 – May 2014, Associate Degree Nursing (A.D.N.) Faculty & Clinical Liaison, San Jacinto College

May 2014 – October 2015, A.D.N. Program Director, San Jacinto College

RESEARCH ACTIVITIES:

Dissertation Title: The Experiences of Emergency Medical Technicians and Paramedics (EMT-Ps) Who Become Registered Nurses: A Naturalistic Inquiry

Grant Support: NA

COMMITTEE RESPONSIBILITIES:

1/2020 – Present Chairman – A.D.N. Readmission Review Committee San Jacinto College

Spearhead the committee responsible for review and decision making for students requesting to return to the nursing program

1/2019 – Present Peer Evaluator Accreditation for Education in Nursing (ACEN)

Assist with program evaluation for accredited nursing programs

1/2012 – 1/2015 Chairman - A.D.N. Program Test Construction Committee – Chairman

Oversees the development of reliable and valid exams for San Jacinto College South Campus Associate Degree Nursing Program

4/2012 – 6/2014 Chairman, A.D.N. Program Admissions Committee San Jacinto College

Spearhead the nursing student acceptance and declination process

TEACHING RESPONSIBILITIES AT UTMB:

None

MEMBERSHIP IN SCIENTIFIC SOCIETIES:

4/2010 – Present	Member, Sigma Theta Tau
5/2017 – Present	Member of The National League of Nursing
5/2017 – Present	Member of The National Society of Leadership and Success
5/2013 – 4/2018	Member of Texas Association of Deans and Directors of Professional Nursing Programs **(**TADDPNP**)**
6/2010 – 4/2018	Member of National Organization of Associate Degree Nursing
6/2010 – 4/2018	Member of Texas Organization of Associate Degree Nursing
3/2007 – 5/2010	Member of Texas Association of Vocational Nurse Educators

BOARD CERTIFICATION: Registered Nurse – December 1993 to Present

LICENSURE INFORMATION: RN-1993- 2002 #691440

RN Multistate Compact License – 2002 – Present #691440

HONORS:

2021-Recipient of UTMB Rebecca and Edwin Gale Professorship Fund Scholarship, Galveston, TX

2021 – Recipient of UTMB School of Nursing Scholarship, Galveston, TX

2020 – Two-time recipient of UTMB CARES ACT: Higher Education Emergency Relief Fund, Galveston, TX

2018 – Recipient of UTMB Arthur V. Simmang Scholarship, Galveston, TX

2017 – Recipient of UTMB John P. McGovern Foundation Scholarship, Galveston, TX

2017 – Recipient of UTMB Lois E. Nickerson, R. N. Endowed Scholarship, Galveston, TX

2016 – Recipient of UTMB Crawford & Hattie Jackson Foundation Scholarship, Galveston, TX

PUBLISHED:

2013 – Dr. Karen Alexander & Shiela R. Ford, MSN-Ed, RNC - "Integrating Change for Positive A.D.N. Program Outcomes" Poster Presentation – Reno, NV

2004 – Andrei V. Alexandrov, Carlos A. Molina, James C. Grotta, Zsolt Garami, Shiela R. Ford, Jose Alvarez-Savin, Joan Montaner, Maher Saqqur, Andrew M. Demchuk, Lemuel A. Moye, Micheal D. Hill, Anne W. Wojner, CLOTBUST Investigators, Ultrasound – enhanced systemic thrombolysis for acute ischmic stroke, New England Journal of Medicine, 351 (21), 2170-8

INVITED LECTURES SYMPOSIA/CONFERENCES:

2020 – "Leading While Remaining Healthy: How to Balance Stress & Health" – Houston, TX

2020 – "Health & Well Being: A Delicate Balance" – Houston, TX

2020 – "Mental & Physical Health" – Houston, TX

2020 – "Leading in Your Health" – Houston, TX

2019 – “Temple Care for Girls” – Houston, TX

2018 – “Remediation Matters: Implementing Strategies to Promote Student Success” – Las Vegas, NV

2016 - “Is this on the Test – The Process of Integrating Faculty Made Exams Into The Nursing Curriculum” – Corpus Christi, TX

2015 - “Is this on the Test – The Process of Integrating Faculty Made Exams Into The Nursing Curriculum” Houston, TX

2015 - “Is this on the Test – The Process of Integrating Faculty Made Exams Into The Nursing Curriculum” – Las Vegas, NV

2015 – “Health Science Reading Strategies” – Houston, TX

2014 - “Implementation of the Flipped Classroom in Nursing” – Houston, TX