

2015

Relationship between Nurses' Job Satisfaction and Quality of Healthcare They Deliver

Samuel Aron
Minnesota State University - Mankato

Follow this and additional works at: <https://cornerstone.lib.mnsu.edu/etds>



Part of the [Community Health and Preventive Medicine Commons](#), and the [Public Health and Community Nursing Commons](#)

Recommended Citation

Aron, S. (2015). Relationship between Nurses' Job Satisfaction and Quality of Healthcare They Deliver [Master's thesis, Minnesota State University, Mankato]. Cornerstone: A Collection of Scholarly and Creative Works for Minnesota State University, Mankato. <https://cornerstone.lib.mnsu.edu/etds/506/>

This Thesis is brought to you for free and open access by the Graduate Theses, Dissertations, and Other Capstone Projects at Cornerstone: A Collection of Scholarly and Creative Works for Minnesota State University, Mankato. It has been accepted for inclusion in All Graduate Theses, Dissertations, and Other Capstone Projects by an authorized administrator of Cornerstone: A Collection of Scholarly and Creative Works for Minnesota State University, Mankato.

Relationship between Nurses' Job Satisfaction and Quality of Healthcare They Deliver

By

Samuel Aron

A Thesis Submitted in Partial Fulfillment of the

Requirements for the Degree of

Master of Science

In

Health Sciences

Minnesota State University, Mankato

Mankato, Minnesota

December 2015

Date: November 05, 2015

Relationship between Nurses' Job Satisfaction and Quality of Healthcare They Deliver

Samuel Aron

This thesis has been examined and approved by the following members of the student's committee.

Dr. Mark Windschitl

Dr. Kristie Campana

Dr. Judith Luebke

Abstract

The Relationship between Nurses' Job Satisfaction and Quality of Care they deliver

Samuel Aron

Master of Science in Health Sciences

Minnesota State University, Mankato, December 2015.

The purpose of this study was to examine nurses' perception of the relationship between job satisfaction and quality of care they deliver, and barriers to a quality care. Data for this cross-sectional study was collected using a paper survey developed by the researcher. This 28-item questionnaire assessed nurses' perception of the relationship between job satisfaction and the quality of care they deliver, and factors that affect the delivery of a quality care and job satisfaction. The questionnaire was distributed to 80 nurses (RNs, LPNs, and nursing assistants) who work in direct patient care at a small Minnesota hospital. Analysis included descriptive and correlation. The research found that there is a positive correlation between nurses' job satisfaction and quality of care they deliver. The study also found that work-load, staff scheduling and stress to be the most significant factors that affect the delivery of a quality care. Moreover, pay/compensation, work environment and care quality are found to be the factors that affect nurses' job satisfaction most.

Acknowledgements

I would like to thank my late parents, Zeccarias and Ezgiharia. Without your motivation, I wouldn't be able to start pursuing my graduate education. It is sad that you are not able to see I finally succeed in achieving your dream. I wouldn't be able to see the end of this thesis without the support and encouragement from my siblings. I would like to thank my four siblings, Eden, Yodit, Yonas and, Yohannes.

I would like to express my gratitude to my advisor and committee members, Dr. Mark Windschitl, Dr. Judith Luebke, and Dr. Kristie Campana for the useful comments, remarks and engagement through the process of completing this thesis. Furthermore I would like to thank Dr. Joseph Visker for your overall support and guidance. Also, I like to thank the participants in my survey, who have willingly shared their precious time completing the survey.

Finally, I thank the almighty God for giving me the strength and guidance throughout.

Table of Contents

Chapter One: Introduction.....	1
Statement of the Problem.....	2
Need for the Study.....	3
Research Questions.....	4
Limitations.....	4
Delimitations.....	4
Assumptions.....	5
Definition of Terms.....	5
Chapter Two: Review of the Literature.....	7
Introduction.....	7
Quality of Care.....	9
Job satisfaction.....	13
Summary.....	15
Chapter Three: Methodology.....	16
Introduction.....	16
Research Design.....	16
Participant Selection.....	16
Population and Sampling Procedures.....	17
Data Collection/Instrumentation.....	17
Data Processing and Analysis.....	18
Chapter Four: Results and Discussions.....	19
Introduction.....	19
Characteristics of Participants.....	19
Findings.....	20
Research Questions and Results.....	31

Summary.....	33
Chapter Five: Conclusions and Recommendation.....	34
Introduction.....	34
Limitations.....	34
Conclusions.....	35
Discussion.....	35
Recommendations.....	37
References.....	39
Appendices.....	47
Appendix A.....	48
Appendix B.....	50
Appendix C.....	52

List of Tables

Table 3.1.....	19
Table 4.1.....	20
Table 4.2.....	20
Table 4.3.....	21
Table 4.4.....	21
Table 4.5.....	22
Table 4.6.....	22
Table 4.7.....	23
Table 4.8.....	23
Table 4.9.....	23
Table 4.10.....	24
Table 4.11.....	24
Table 4.12.....	25
Table 4.13.....	25

Table 4.14.....	26
Table 4.15.....	26
Table 4.16.....	27
Table 4.17.....	27
Table 4.18.....	27
Table 4.19.....	28
Table 4.20.....	28
Table 4.21.....	29
Table 4.22.....	29
Table 4.23.....	29
Table 4.24.....	30
Table 4.25.....	30
Table 4.26.....	31
Table 4.27.....	32

Chapter One - Introduction

Statement of the Problem and Objective of the Study

The healthcare industry has come under tight scrutiny from all stakeholders so as to improve the quality of the services clients receive and ensure their safety. Parallel to the advancement of medicine and medical technologies, the prevalence of chronic health problems has increased. U.S. populations increased and have become more diversified, thus, making healthcare delivery in the U.S. very complicated. Additionally, demographic changes, and the economic changes and uncertainties have affected U.S. healthcare service delivery.

Healthcare administrators are required to prioritize the safety and wellbeing of their clients, and, simultaneously, ensure the financial wellbeing of their organizations. The viability of a healthcare facility is dependent upon client satisfaction and its financial activities. Employees who engage in direct healthcare delivery play a great role in fulfilling these responsibilities. As much as employees are required to fulfill their responsibilities to the desired effect, employers are required to satisfy their workforce to improve the services they provide to their clients.

The purpose of this study was to examine nurses' perception of the relationship between job satisfaction and quality of care nurses deliver, and barriers to a quality care. Understanding the importance of employee satisfaction, and understanding how employees' satisfaction can be enhanced is essential to providing quality healthcare service with desirable outcomes.

Statement of the Problem

The definition of quality often depends on the stakeholders. Stakeholders are, as the name implies, people with some stake or concern in a process (Kaprielian & Wiseman, 2005). Healthcare organizations, their employees and patients and customers are integral segments of this industry's stakeholders. This workforce ranges from people who take care of the facility, physicians, nursing staff, allied healthcare staff (physical therapists, respiratory therapists, etc.) and direct support staff such as registrars and administrators. Quality healthcare cannot be achieved without addressing the needs of this workforce.

In the last few decades, the healthcare system has gone through many changes which affect nurses' job satisfaction either positively or negatively. New organizational structures and reimbursement strategies have created incentives that may affect quality of care (Brook, McGlynn, & Schuster, 2005).

Mrayyan (2006) stated that major changes that have taken place globally in all healthcare systems that influence nurses' job satisfaction, patients' satisfaction, and quality of nursing care. A study by Aiken & colleagues (2012) in the United States and twelve European countries, found that a substantial proportion of nurses in every country reported quality of care deficits, high nurse burnout, job dissatisfaction, and intention to leave their current positions. In 2010, the Office of Inspector General for Health and Human Services said that bad hospital care contributed to the deaths of 180,000 patients in Medicare alone in a given year (Allen, 2013).

Healthcare facilities should aim at delivering quality and safe care that ensure the wellbeing and recovery of their clients.

Need for Study

Patients should be provided with safe and high quality healthcare service. As a result, healthcare organizations have the responsibility to provide effective service targeting a desirable outcome. Healthcare employees have moral and professional responsibilities to promote the values and missions of their employers.

Employers should make sure that their employees are satisfied with their job by providing them healthy and friendly work environments. Healthy and friendly nurse practice environments are characterized by high levels of job satisfaction and engagement, as well as favorable scores on quality of care and patient safety indicators such as mortality, co-morbidity, and serious adverse events (Tourangeau et al.,2005; Laschinger & Leiter, 2006;Aiken et al.,2008; Friese et al., 2008 as cited in Franck et al., 2014). Previous studies have concluded that unsatisfied health care employees negatively affect the quality of care, which adversely affects patient satisfaction and loyalty to a hospital (Al-Mailam, 2005).

This study investigated the relationship between nurses' job satisfaction and quality of healthcare they deliver, and ways to satisfy employees and improve the quality of care. Understanding the importance of employees' job satisfaction, and understanding how employees' job satisfaction can be enhanced is essential to provide quality healthcare service with desirable patient outcomes. The dependent variable was the nurses' perception of quality of care delivered and the independent variable was employees' job satisfaction.

Research Questions

1. What is the relationship between nurses' job satisfaction and quality of healthcare they deliver?
2. What factors affect nurses' satisfaction with their job?

Method of Study

Using a quantitative design, a cross sectional study of eighty nurses (RNs and LPNs) from a suburban hospital in one of the Twin Cities' health systems was conducted. Nurses were asked about how satisfied they are with their current job, their perception of the relationship between job satisfaction and the quality of the care they deliver, and factors that affect job satisfaction and the quality of care they deliver.

Limitations

One of the limitations of this study is its cross-sectional design. This limits any generalization that can be made from the findings of this study. The fact that the study is correlational in nature is also another major limitation since it is hard to know whether job satisfaction causes quality of care or vice versa. Moreover, nurses' willingness to participate in the survey and, thus, finding the planned sample size was challenging. Getting permission from hospitals to conduct the study was also challenging. For confidentiality purposes, the name of the healthcare facility will remain anonymous.

Delimitations

This research is limited to a hospital based nurses (LPNs, RNs and nursing assistants) who are continuously in direct contact with patients and their families. The three week time frame to collect the data was also another delimiting factor.

Assumptions

Employees may not be honest in expressing their feelings and perceptions fearing a reprisal from their employer. Additionally, satisfaction is very subjective, different people may have different interpretation and perception of job satisfaction.

Definition of Terms

Affordable Care Act. “The nation’s health reform law enacted in March 2010” (American Public Health Association (APHA), 2014, “Health Reform: Overview”, para. 1).

Clinical Outcomes. “*A health state of a patient resulting from health care*” (Agency for Healthcare Research and Quality (AHRQ), 2014, “Selecting Health Outcome”, para. 1).

Mortality rate. “The number of deaths in a given area or period, or from a particular cause” (Mortality rate, 2015).

Licensed Practical Nurse (L.P.N.). “A graduate of a school of practical nursing whose qualifications have been examined by a state board of nursing and has been legally authorized to practice as a licensed practical or vocational nurse (L.P.N. or L.V.N.)” (Licensed Practical Nurse, 2015).

Nurse. “A person who cares for the sick or infirm; *specifically*: a licensed health-care professional who practices independently or is supervised by a physician, surgeon, or dentist and who is skilled in promoting and maintaining health” (Nurse, 2015).

Nursing. Nursing is “the protection, promotion, and optimization of health and abilities, prevention of illness and injury, alleviation of suffering through the diagnosis and treatment of human response, and advocacy in the care of individuals, families,

communities, and populations” (American Nurse Association (ANA), 2014, “What is Nursing?”)

Registered Nurse (RN). “ A graduate nurse registered and licensed to practice by a State Board of Nurse Examiners or other state authority” (Registered Nurse, 2015).

Skill mix. “The various skill levels of health-service staff required, either within a particular discipline or for the total staff within a health authority, to provide effective care” (Skill mix, 2015).

Chapter Two

Review of Literature

Introduction

The purpose of this study was to examine the relationship between nurses' job satisfaction and quality of healthcare delivered, and ways to satisfy employees and improve the quality of care they deliver. Understanding the importance of nurses' job satisfaction, and understanding how job satisfaction can be enhanced is essential in providing a quality care with desirable clinical outcomes.

The focus of this chapter is to present a literature review of nurses' job satisfaction and its effect on the quality of care nurses deliver. The literature review revealed important information that helped to focus on the variables that influence employee job satisfaction and quality of health care they deliver. The literature reviewed in this study included research on the health care system in the United States, a brief analysis of effects of healthcare evolution on healthcare services globally, description of variables that affect employees' job satisfaction, and description of ways used to measure the quality of care nurses deliver. The review focuses on history of the healthcare service industry, quality of healthcare, and state of employees' job satisfaction, and its influence on the quality of healthcare service delivery.

Evolution of the Healthcare System

In the last few decades, the healthcare system has come through many changes. In the United States, for example, new organizational structures and reimbursement strategies have created incentives that may affect quality of care (Brook, McGlynn & Schuster, 2005). In the face of sustained increasing pressure on health expenditures from

ageing populations, rising public expectations, and the introduction of new technology, European countries have been implementing a wide range of cost containment strategies (Aiken et al., 2012). Although some of the strategies are likely to improve quality, concerns about potentially negative consequences have prompted a movement to assure that quality will not be sacrificed to control costs (Brook, McGlynn & Schuster, 2005).

In the United States, the government has reformed the payment system to control costs without sacrificing the quality of care delivery. Pay for performance, alignment of incentives, the medical home, payment by episodes, and provider performance reports are a set of payment reforms that can result in lower costs and improved quality of care (Averill et al., 2010).

Effects of changes to the healthcare system on care delivery. By 1980, Medicare claims expenditures had risen dramatically and resulted in a major change in reimbursement policy. Reimbursement of Medicare claims through the use of “usual, customary, and reasonable rates” was replaced by a set of fee schedules based on diagnosis (diagnosis related groups or DRGs) and is the system in use today (Tewes, 2009).

Healthcare facilities have faced increasing challenges from changes in payment schedule and regulatory requirements from the federal government and private insurance companies. As employers, they had to share the medical cost of their employees. This means health facilities had to implement strategies that could ensure their financial wellbeing. Restructuring, cutting costs, and cutting employee benefits are the most common actions taken by employers. Moreover, the management of healthcare personnel takes place in a complex environment involving a variety of professionals, extensive use

of materials and equipment, and an array of services that extend beyond health care to include food, hospitality and instruction (Peltier & Dahl, 2009).

One of the common actions taken to cut cost is reducing the size of the workforce. Because nurses are the largest professional group in the healthcare organization and critical to the provision of healthcare, reducing the nursing workforce was considered as the first strategy to decrease expenses in most hospitals (Ma, Lee, Yang & Chang, 2009).

Quality of Care

It is important to define quality of care to understand its elements. Research related to the meaning, definition and perception of quality nursing care has been limited (Alligood & Burhans, 2010). According to Birkmeyer, Cooperberg, and Litwin (2009), the Institute of Medicine (IOM) defined quality of care as “the degree to which health services for individuals and populations increase the likelihood of desired health outcomes and are consistent with current professional knowledge” (p. 411).

Many health care administrators are increasingly showing concern for delivering high quality care in which both the customer (patients) and providers (employees) are satisfied while maintaining a strong financial environment (Love et al., 2008 as cited in Peltier & Dahl, 2009). Despite dissemination of numerous innovative patient safety and quality programs in recent years, however, meaningful improvements have been disturbingly slow (Alligood & Burhans, 2010). There is clear evidence that quality remains a serious concern, with expected outcomes not predictably achieved and with wide variations in standards of health-care delivery within and between health-care systems (World Health Organization, 2006).

The Affordable Care Act, in the US, authorized the Centers for Medicare and Medicaid Services to establish three pay-for-performance programs to improve the quality of care in acute care hospitals while controlling costs (Brooks, 2015). Patients may be readmitted to hospitals within a short time after their discharge for reasons such as recurrence, side effects or adverse effects from the care they received. A comprehensive 2009 study of Medicare claims data from 2003-2004 found that one in five of the nearly 12 million Medicare patients discharged during this period returned to the hospital within 30 days (Brooks, 2015).

Another indicator of the quality of care patients receive is the rate of hospital-acquired conditions such as falls, pressure ulcers and infections. In 2008 Medicare implemented its hospital-acquired conditions policy to penalize hospitals for poor-quality care and encourage them to eliminate avoidable complications (Bindman, Luft & McNair, 2009). Bindman, Luft, and McNair (2009), using a 2006 hospital discharge data, estimated a \$1.1–\$2.7 million hospital payment reduction nationally based upon enforcement of this policy.

Evaluating Quality of Care

Measuring quality of care is a difficult task. In fact, the definition and meaning of quality in all healthcare disciplines remains elusive, subjective, and stakeholder-specific, resulting in measurement and improvement challenges (Burhans, 2007 as cited in Alligood & Burhans, 2010). Quality can be evaluated based on structure, process, and outcomes (Donabedian, 1980 as cited in Brook et al., 2005). Structural quality evaluates health system characteristics, process quality assesses interactions between clinicians and

patients, and outcomes offer evidence about changes in patients' health statuses (Brook et al., 2005).

Donabedian (2005) stated that patient outcomes tend to be fairly concrete and, as such, are seemingly amenable to more precise measurement of quality of care. Outcome measures also have been used in health care organizations and systems to assess quality and guide efforts to improve it (Cleary & O'Kane, nd, p. 9).

Evaluation of quality of care should be approached from not only from a patient outcomes and satisfaction perspective but also from the nurses' perspective to reduce bias of opinion. Alligood and Burhans (2010) stated that while nurses evaluate quality based on assessment, planning, or the effectiveness of treatments and medications, patients likely base their evaluation based on communication, listening, kindness and responsiveness of their nurses.

There is a concern, though, that nurses do not have common opinions of what quality of nursing care means. It is notable that, with 2.6 million nurses in the USA delivering patient care, their daily evaluation of that care is done without a shared understanding of what quality nursing care really entails (Burhans & Alligood, 2010).

Factors Affecting Delivery of a Quality Care

Nursing staffing. Nurse-patient ratios impact patient safety and quality of care. A multivariate analysis of nurse staffing and patient outcomes reported that when RN staffing is increased, there were significant improvements in patient mortality following a medical or surgical complication (Harless, Herrera, Mark & Spetz, 2013). A study on relationship of staffing and hospital stay reported a significant negative relationship between staffing and length of stay, suggesting that early recognition and treatment of

potential adverse events led to earlier discharges (Burke, Lewis-Voepel, Pechlavanidis, & Talsma, 2012). This may be because nurses get enough time to interact with their patients when the nurse-patient ratio is higher.

Another aspect of the nursing staffing is the skill mix. Identifying and maintaining the appropriate number and mix of nursing staff is critical to the delivery of quality patient care (American Nurses Association, 2014). A study of eleven hospitals over a two-year period demonstrated a significant relationship between RNs skill mix and medication errors and falls (Anderson, Fong, Frith, & Tseng, 2012). Hospitals in Europe where nursing staff care for fewer patients and have a higher proportion of bachelor's degree-trained nurses had significantly fewer surgical patients die while hospitalized (National Institute of Health, 2014).

American Nurses Association (2015) stated that an optimal staffing model must consider the unique patient care settings during specific times of day and must assess patient acuity, unlicensed assistive personnel, skills, education, and training within specific settings

Scheduling /Shifts. Nurses usually work an 8 or 12 hour shift in a 24 hours/7 day cycle. Due to unanticipated staffing and patient census changes, it is common for nurses to be mandated for overtime beyond their scheduled hours resulting in burnout. In a study of nursing shifts, the percentage of nurses reporting burnout and an intention to leave the job increased incrementally as shift length increased (Aiken, Sloane, & Stimpfel, 2012). Aiken, Sloane, and Stimpfel (2012) also found that the longer the shift, the greater the likelihood of adverse nurse outcomes such as medication errors, missed treatment, stress and staff burnout. Aiken, Cheney, Clarke, Lake, and Sloane (2008) found that mortality rate for

surgical patients was 60% higher in poorly-staffed hospitals than in hospitals with better staffing.

Care environment (Work environment). Staff nurses often work in problematic practice environments characterized with various difficulties and stressors that can undermine staff nurses' full capacity to provide excellent care (Franck, Timmermans, Van Bogaert, & Van Heusden, 2014). In its 2004 report titled "Keeping Patients Safe: Transforming the Work Environment of Nurses", the IOM validated research indicating that nursing care was directly related to improved patient outcomes and that nursing vigilance protected patients against errors (Burhans & Alligood, 2010). Aiken, Cheney, Clarke, Lake, and Sloane (2008) found that mortality rate for surgical patients was 60% higher in hospitals with poorer patient care environments than those with better care environment.

Job Satisfaction

Job satisfaction has different meanings to different people. Saari and Judge (2004) defined job satisfaction as "a pleasurable or positive emotional state resulting from the appraisal of one's job or job experiences".

Because nursing remains in the midst of its most significant shortage, the satisfaction or dissatisfaction of nurses is of great concern to nursing and hospital administrators (Lynn, Moore, & Morgan, 2009). In a survey of Chinese nurses, Chang and colleagues (2009) found job satisfaction was a significant predictor of whether or not a nurse intended to leave a current job.

Dissatisfied nurses may be distracted from their patients, fail to provide holistic care, and in general, provide a lower quality of nursing care (Mrayyan, 2006). According

to Kvist, Voutilainen, Mantynen, and Vehvilainen-Julkunen (2014), job satisfaction of nursing staff is related to patients' perceptions of quality of care.

Measuring Job Satisfaction

According to Barriball, Lu, While, and Zhang (2011),

Job satisfaction can be considered as a global feeling about the job or as a related constellation of attitudes about various aspects or facets of the job. The global approach is used when the overall attitude is of interest while the facet approach is used to explore which parts of the job produce satisfaction or dissatisfaction. (p.1018)

Job satisfaction is the function of complex interactions of economic, social and psychological factors that are subject to three major areas for measurements: professional job characteristics, organizational attributes and effects on patient outcomes and quality of care (Chung, Eun-Jung, & Kwak, 2010).

Professional job characteristics include factors associated with working as a nurse such as staffing, work hours, or workload that significantly correlate with job satisfaction (Best & Thurston, 2004; Hoffman & Scott, 2003 as cited in Chung et al., 2010). Hinshaw (2008) remarked that many nurses leave their profession prematurely due to concerns over inadequate staffing, providing safe care, long working hours and a sense of not being valued or involved in decision-making processes concerning patients. Nurse retention problems will result in nurse shortages. The significance of the nursing shortage is the impact it has on hospitals at the operations level and on patients at the patient care level (Ritter, 2011).

Organizational attributes appear to be an important cluster of factors for job satisfaction (Kohn et al., 2000; Kuokkanen et al., 2003 as cited in Chung et al., 2010). A study of Dutch nurses by Hinno and associates (2011) indicated a clear link between the

quality of care provided and the organizational attributes such as support for professional development, adequate staffing, assuring nursing competence and supportive management.

Patient outcomes and quality of care may be positively or negatively correlated with nurse's job satisfaction. Job satisfaction is always an important issue in nursing because it has been linked to predictions of nurse turnover (Chang, Chiu, Lee, Lin, & Ma, 2009). In order to retain its best-qualified employees, an organization needs to implement competitive measures that satisfy employee needs. Nurses' work environments contribute to patient outcomes and are influenced by organizational management practices, workforce development, work design and the organization's culture (McGillis Hall, Doran, & Pink, 2008).

Summary

Quality of healthcare in the United States is highly affected by the continuous reforms of the healthcare system. Even though, the health facilities are primarily affected by the reforms and changes, the employees were the ones who shoulder the burden of continuous reforms most. The literature I reviewed in the area of effects of healthcare reforms on quality of care generally agree that the quality of care delivered is affected by the continuous changes to the healthcare system. The literature I reviewed in the area of employee job satisfaction agrees quality of care improves when employees are satisfied with their job.

Chapter 3: Methodology

The purpose of this study was to examine the relationship between nurses' job satisfaction and quality of healthcare delivered, and ways to satisfy nurses and improve the quality of care they deliver. Understanding the importance of employee satisfaction, and understanding how employees' satisfaction can be enhanced is essential to provide a quality healthcare service with desirable outcomes.

This chapter describes the research methods used for this study. The first section explains the process of participant selection and obtaining informed consent. The study population and the sample are then described. Finally, data collection methods and procedures and data analysis methods are described.

Research Design

Using a descriptive quantitative design, eighty nurses were surveyed about their satisfaction with their job, their perception about quality of care and suggestions for how to enhance job satisfaction and improve the quality of care. A cross-sectional study was preferred to determine the perception of participants at a specific time since the study doesn't need a follow up. Cross sectional studies are disadvantageous since they are unable to tell causal relationships (only correlation), and generalization is limited by sampled populations (Thisted, 2006).

Participant Selection and Process of Obtaining Informed Consent

A group administration of survey was applied in the process of selecting nurses who work in direct patient care and other hospital support services. A group administration was applied to increase the number of survey participants. These individuals have both direct and indirect contact with patients in the hospital. Participants

were selected from a regional health care center in Minnesota. The selection criterion was any nurse who works in direct patient care in the hospital.

Potential participants were informed verbally during staff meetings of the purpose and nature of the study, and invited to participate voluntarily after Minnesota State University's IRB approved the study (See Appendix A).

An informed consent (see Appendix B) was provided in person to those who showed interest to participate in the study. A signed informed consent was obtained in person from all participants. Thereafter, research questionnaires were handed to participants.

Population and Sampling Procedures

The entire nursing staff of the facility was asked to voluntarily participate in the survey. The researcher attended staff meetings at the beginning of various shifts and personally asked nurses to voluntarily participate in the study. Nursing units were randomly chosen from facility.

Data Collection/Instrumentation

The survey used in this study addressed two purposes. The first purpose was to examine the relationship between nurses' job satisfaction and quality of care they deliver. The second purpose was to explore factors that affect nurses' job satisfaction. The survey was developed as a result of the review of the literature. The survey items are located in appendices page (see Appendix C). The survey items and their relationship to the research questions is presented in the table below (see table 3.1).

Table 3.1 explains the relationship of each survey item to the research questions in this study is expressed in the chart below.

Table 3.1

Table of Specifications

Question (Q)	Survey items used to assess RQ	Level of Data	Analysis needed to assess RQ
What is the relationship between nurses' job satisfaction and quality of healthcare they deliver?	Q1, Q12-Q16, Q27	Interval, Ordinal	Correlational and descriptive statistics
What factors affect nurses' satisfaction with their job?	Q1-Q11, Q14-Q15, Q17-Q24, Q26, Q28	Ordinal	Descriptive

Survey questionnaires and an envelope were distributed in person, and survey responses were collected over a period of three weeks. The survey was estimated to take 15 minutes to complete. Participants' confidentiality was maintained throughout the study by keeping participant identity anonymous. Gender and ethnicity questions were excluded from survey questions to guarantee anonymity. Only the principal researcher and the student researcher had an access to the survey responses. The researcher also arranged a survey response drop off units in the telemetry monitoring office unit in a way that guarantees the confidentiality agreement between the researcher and the participants.

Data Processing and Analysis

Quantitative data was collected, and was analyzed using SPSS by the researcher. The researcher will keep the survey responses in a locked, secured location for five years after the study is completed.

Chapter 4

Findings and Summary

Introduction

The purpose of this study was to examine nurses' perception of the relationship between job satisfaction and quality of care nurses deliver, and perceptions of barriers to quality care. The study also investigated the factors that affect job satisfaction.

Data for this study were collected by a printed survey. A total of 80 questionnaires were distributed at 3 nursing units by charge nurses to staff meetings at the beginning of all shifts and at the Charge Nurse desk in each unit. Sixteen nursing staff completed the survey voluntarily. The return rate was 20%. All the 16 questionnaires were complete and usable.

The survey included questions on overall satisfaction, factors affecting job satisfaction, quality of care at the hospital and factors that affect delivery of quality care. A description of participants and demographic data is included in this chapter. Furthermore, findings based on the research questions posed are presented.

Characteristics of the Sample

The study population consisted of 80 Registered Nurses (RN), Licensed Practical Nurses (LPN) and Nursing Assistants (NA) who work in direct patient care in a hospital setting. The age of respondents ranged from 22 to 51 years. Participants' years of experience at current position with the employer ranged from 1 to 30 years.

Of the sixteen participants, 7 (43.75%) participants were RNs, 6 (37.5%) participants were LPNs and 3 (18.75%) participants were nursing assistants.

Table 4.1 represents the number of years participants plan to stay with their current employer. One (6.3%) participant plans to stay up to 1 year, 7 (43.8%) participants plan to stay 2 to 5 years, 4 (25%) plan on staying 6 to 10 years and 4 (25%) of the participants reported they plan to stay for more than 10 years.

Table 4.1

Plan to stay with current employer

Years	Frequency	Percent
Up to 1	1	6.3
2 to 5	7	43.8
6 to 10	4	25.0
More than 10	4	25.0
Total	20	100.0

Findings

Data were analyzed using IBM SPSS Statistics (version 23). A descriptive analysis was done on research items 1-27. A correlational analysis was done between participants' overall satisfaction and their rating of the care quality at the hospital.

Findings for every research item are displayed in detail in table and text format.

Table 4.2 represents participants' overall satisfaction with their work. Fifteen (93.8%) participants expressed their satisfaction with their work. one (6.3%) participant was neutral in her/his opinion.

Table 4.2

Overall Satisfaction with Work

	Value	Frequency	Percent	Valid Percent
Valid	Neutral	1	6.3	6.3
	Agree	8	50.0	50.0
	Strongly Agree	7	43.8	43.8
	Total	16	100.0	100.0

Table 4.3 represents participants' perception of their value to the employer. Twelve (75%) employees reported they feel valued and 2 (12.5%) participants didn't feel valued at the hospital. Two (12.5%) participants neither agreed nor disagreed.

Table 4.3

Feel valued at this hospital

	Value	Frequency	Percent	Valid Percent
Valid	Disagree	2	12.5	12.5
	Neutral	2	12.5	12.5
	Agree	9	56.3	56.3
	Strongly Agree	3	18.8	18.8
	Total	16	100.0	100.0

Table 4.4 shows how proud participants are working at the hospital. Three (18.8%) participants strongly agreed they are proud to work for the hospital and 11 (68.8%) participants agreed.

Table 4.4

I am Proud to Work for this Hospital

	Value	Frequency	Percent	Valid Percent
Valid	Disagree	1	6.3	6.3
	Neutral	1	6.3	6.3
	Agree	11	68.8	68.8
	Strongly Agree	3	18.8	18.8
	Total	16	100.0	100.0

Table 4.5 represents participants' feelings of autonomy to make decisions. Five (31.3%) participants strongly agreed they have autonomy to make decisions while 9 (56.3%) agreed they have autonomy to make decisions. Two (12.5%) participants were neutral.

Table 4.5

I have autonomy to Make Decisions

	Value	Frequency	Percent	Valid Percent
Valid	Neutral	2	12.5	12.5
	Agree	9	56.3	56.3
	Strongly Agree	5	31.3	31.3
	Total	16	100.0	100.0

Table 4.6 shows how participants rated their physical working environment. Four (25.0%) participants strongly agreed they have good physical working environment. Of 16 respondents, 9 (56.3%) agreed their physical working environment is good. Three (18.8%) participants were neutral in their opinion.

Table 4.6

Good Physical Working Conditions

	Value	Frequency	Percent	Valid Percent
Valid	Neutral	3	18.8	18.8
	Agree	9	56.3	56.3
	Strongly Agree	4	25.0	25.0
	Total	16	100.0	100.0

Table 4.7 shows perceptions of if good work is recognized by the employer. Two (12.5%) participants reported they strongly agreed, 8 (50.0%) agreed that their good work is recognized and 2 (12.5%) participants didn't believe their good work is recognized. Four (25%) were neutral in their opinion.

Table 4.7

Good Work Recognition

	Value	Frequency	Percent	Valid Percent
Valid	Disagree	2	12.5	12.5
	Neutral	4	25.0	25.0
	Agree	8	50.0	50.0
	Strongly Agree	2	12.5	12.5
Total		16	100.0	100.0

Table 4.8 shows how participants felt about job security at current employer. Six (37.5%) strongly felt their job is secured, 5 (31.3%) agreed their job is secured and 5 (31.3%) participants were neutral.

Table 4.8

My Job is Secure

	Value	Frequency	Percent	Valid Percent
Valid	Neutral	5	31.3	31.3
	Agree	5	31.3	31.3
	Strongly Agree	6	37.5	37.5
Total		16	100.0	100.0

Table 4.9 shows if participants feel part of the team they work with. Four (25%) participants strongly agreed they feel part of their team and 9 (56.3%) participants agreed they feel part of their team. Three (18.8%) participants were neutral in their response.

Table 4.9

I Feel Part of the Team

	Value	Frequency	Percent	Valid Percent
Valid	Neutral	3	18.8	18.8
	Agree	9	56.3	56.3
	Strongly Agree	4	25.0	25.0
Total		16	100.0	100.0

Table 4.10 shows if participants like the type of work they do. Twelve (75%) reported they strongly agreed that they like the type of work and 4 (25%) participants agreed they like their job.

Table 4.10

I Like the Type of Work I Do

	Value	Frequency	Percent	Valid Percent
Valid	Agree	4	25.0	25.0
	Strongly Agree	12	75.0	75.0
Total		16	100.0	100.0

Table 4.11 shows if participants like their coworkers. Fifteen (93.8%) participants reported they like the people they work with. One (6.3) respondent was neutral.

Table 4.11

I Like my Coworkers

	Value	Frequency	Percent	Valid Percent
Valid	Neutral	1	6.3	6.3
	Agree	8	50.0	50.0
	Strongly Agree	7	43.8	43.8
Total		16	100.0	100.0

Table 4.12 shows if participants trust what the management tells them. Four (25%) participants strongly agreed they trust what the management tells them, 8 (50%) participants agreed they trust the management's words and 2 (12.5%) participants reported they disagreed. Two (12.5%) participants were neutral.

Table 4.12

Trust what I am Told by the Management

	Value	Frequency	Percent	Valid Percent
Valid	Disagree	2	12.5	12.5
	Neutral	2	12.5	12.5
	Agree	8	50.0	50.0
	Strongly Agree	4	25.0	25.0
	Total	16	100.0	100.0

Table 4.13 represents staff perception of if quality care is a top priority to the hospital.

Six (37.5%) participants strongly agreed quality is at the top of the hospital strategic priorities. Six (37.5) participants reported they agree the hospital prioritize quality at the top. Four (25%) participants reported neutral.

Table 4.13

Quality is a Top Priority at this Hospital

	Value	Frequency	Percent	Valid Percent
Valid	Neutral	4	25.0	25.0
	Agree	6	37.5	37.5
	Strongly Agree	6	37.5	37.5
	Total	16	100.0	100.0

Table 4.14 represents staff rating of the quality of care provided at their hospital. Five (31.3%) reported they strongly agree the quality of care is outstanding. Eight (50%) agreed the hospital provides an outstanding care whereas 3 (18.8%) were neutral in their opinion.

Table 4.14

Quality of Care at this Hospital is Outstanding

	Value	Frequency	Percent	Valid Percent
Valid	Neutral	3	18.8	6.3
	Agree	8	50.0	50.0
	Strongly Agree	5	31.3	31.3
	Total	16	100.0	100.0

Table 4.15 represents participants who reported job satisfaction affects their work performance. Eight (50%) participants strongly agreed that job satisfaction affects their performance. Five (31.3%) agreed, 2 (12.5%) were neutral in their opinion.

Table 4.15

Performance Affected by Job Satisfaction

	Value	Frequency	Percent	Valid Percent
Valid	Disagree	1	6.3	6.3
	Neutral	2	12.5	12.5
	Agree	5	31.3	31.3
	Strongly Agree	8	50.0	50.0
	Total	16	100.0	100.0

Table 4.16 shows if participants believed quality of care is affected by job satisfaction. Nine (56.3%) participants strongly agreed that quality of care is affected by job satisfaction. Five (31.3%) participants agree they believe job satisfaction affects quality of care. One (6.3%) participant didn't believe quality of care is affected by job satisfaction. One (6.3%) participant was neutral.

Table 4.16

Quality of Care is affected by Job Satisfaction

	Value	Frequency	Percent	Valid Percent
Valid	Disagree	1		6.3
	Neutral	1		6.3
	Agree	5		31.3
	Strongly Agree	9		56.3
	Total	16		100.0

Table 4.17 shows if participants think patient safety is a priority at the hospital. Fifteen (93.8%) participants reported patient safety is a priority at the hospital.

Table 4.17

Patient Safety is a Priority

	Value	Frequency	Percent	Valid Percent
Valid	Neutral	1	6.3	6.3
	Agree	6	37.5	37.5
	Strongly Agree	9	56.3	56.3
	Total	16	100.0	100.0

Table 4.18 represents participants' perceptions of supervisory support. Five (31.3%) participants strongly agreed that they get adequate support from supervisors, 6 (37.5%) participants agreed, 1 (6.3%) disagreed and 1 (6.3%) strongly disagreed. One (6.3%) was neutral in her/his opinion.

Table 4.18

Supervisor Support

	Value	Frequency	Percent	Valid Percent
Valid	Strongly Disagree	1	6.3	6.3
	Disagree	1	6.3	6.3
	Neutral	3	18.8	18.8
	Agree	6	37.5	37.5
	Strongly Agree	5	31.3	31.3
	Total	16	100.0	100.0

Table 4.19 shows if participants feel treated with respect by supervisors/managers. Six (37.5%) participants strongly agreed their supervisors/managers treat them with respect, 7 (43.8%) participants agreed they are treated with respect and 3 (18.8%) were neutral in their response.

Table 4.19

Treatment by Management

	Value	Frequency	Percent	Valid Percent
Valid	Neutral	3	18.8	18.8
	Agree	7	43.8	43.8
	Strongly Agree	6	37.5	37.5
	Total	16	100.0	100.0

Table 4.20 shows if participants were given timely feedback on their performance. Six (37.5%) participants reported they strongly agree that they are given timely feedback. Another 6 (37.5%) agreed that they are given timely feedback. One (6.3%) participant disagreed. Three (18.8%) participants were neutral in their response.

Table 4.20

Timely Feedback on Performance

	Value	Frequency	Percent	Valid Percent
Valid	Disagree	1	6.3	6.3
	Neutral	3	18.8	18.8
	Agree	6	37.5	37.5
	Strongly Agree	6	37.5	37.5
	Total	16	100.0	100.0

Table 4.21 shows if participants feel they are provided with adequate equipment to accomplish their task. Fifteen (93.8%) participants reported they are provided with adequate equipment to accomplish their task. One (6.3%) participant was neutral.

Table 4.21

Provided Adequate Equipment

	Value	Frequency	Percent	Valid Percent
Valid	Neutral	1	6.3	6.3
	Agree	10	62.5	62.5
	Strongly Agree	5	31.3	31.3
	Total	16	100.0	100.0

Table 4.22 shows if participants feel the employer provides them with adequate training to accomplish their task. Fifteen (93.8%) participants reported they are provided with adequate training to do their job.

Table 4.22

Adequate Training

	Value	Frequency	Percent	Valid Percent
Valid	Neutral	1	6.3	6.3
	Agree	10	62.5	62.5
	Strongly Agree	5	31.3	31.3
	Total	16	100.0	100.0

Table 4.23 represents participants' rating of their pay or compensation by their employer. One (6.3%) participant strongly agreed that compensation is fair. Twelve (75%) participants agreed they are compensated fairly. Three (18.8%) participants were neutral.

Table 4.23

Compensation/Pay

	Value	Frequency	Percent	Valid Percent
Valid	Neutral	3	18.8	18.8
	Agree	12	75.0	75.0
	Strongly Agree	1	6.3	6.3
	Total	16	100.0	100.0

Table 4.24 represents participants' rating of the benefits provided by their employer.

Eight (50%) participants strongly agreed the employer offers them a good benefits package, 7 (43.8%) participants agreed they are offered a good benefit package whereas 1 (6.3%) participant was neutral.

Table 4.24

Benefits Package

	Value	Frequency	Percent	Valid Percent
Valid	Neutral	1	6.3	6.3
	Agree	7	43.8	43.8
	Strongly Agree	8	50.0	50.0
	Total	16	100.0	100.0

Table 4.25 shows if participants would recommend employment at this hospital to a friend. Three (18.8%) strongly recommend employment to a friend. Ten (62.5%) agreed that they would recommend employment at the hospital to a friend. Three (18.8%) participants were neutral in their opinion

Table 4.25

Recommend Employer

	Value	Frequency	Percent	Valid Percent
Valid	Neutral	3	18.8	18.8
	Agree	10	62.5	62.5
	Strongly Agree	3	18.8	18.8
	Total	16	100.0	100.0

Research Question One

What is the relationship between nurses' job satisfaction and quality of healthcare they deliver?

A Pearson correlation calculated to determine the relationship between job satisfaction and quality of care delivered. Based on findings of this study, there was a positive relationship between perceived level of job satisfaction and quality of care at the hospital ($r= 0.337, p= 0.202$). The majority of participants (87.6%) reported they believe there is a relationship between job satisfaction and quality of care (see table 4.16). Data collected also showed 7 (43.8%) participants identified quality of care they deliver influences their satisfaction with their job (see table 4.27).

Table 4.26 shows participants pick of the three top most factors that affect the delivery of quality care. Work load was mentioned by 87.5% of participants, staff scheduling was mentioned by 81.3% and stress was the third most mentioned factor (68.8%).

Table 4.26

Factors that Affect Quality of Care

	Variable	Frequency	Percent
Valid	Work load	14	87.5
	Staff scheduling	13	81.3
	Stress	11	68.8
	Poor management	6	37.5
	Inadequate training	3	18.8

Research Question Two

What factors affect nurses' satisfaction with their job?

Pay/compensation (62.5%), work environment (56.3%) and quality of care (43.8%) were among the top three factors mostly mentioned by participants as affecting job satisfaction.

Table 4.27 shows participants' rating of factors that influence job satisfaction. Pay, work environment, quality of care and stress were among the top three factors participant selected.

Table 4.27

Factors that Affect Job Satisfaction

	Variable	Frequency	Percent
Valid	Pay	10	62.5
	Work environment	9	56.3
	Quality of care	7	43.8
	Stress	7	43.8
	Management	5	31.3
	Benefits	5	31.3
	Patient satisfaction	4	25.0

Q28. Please tell us what this hospital can do to increase your satisfaction as an employee.

Participants gave the different opinions they think would improve/increase employee job satisfaction. Their opinions are summarized as follows:

Monitor workload

Better benefits, pay and employee perks

Equal attention to all shifts

Equal focus on staff satisfaction as patient satisfaction

Better training

Staff appreciation and recognition

Management should focus on positives instead of only on negatives

Summary

The intent of this study was to examine nurses' perception of the relationship between job satisfaction and quality of care nurses deliver, and perceptions of barriers to a quality care. The study also investigated the factors that affect job satisfaction.

It was found that there is a positive relationship between job satisfaction and quality of care. The findings also showed that the majority of the participants perceived there is a relationship between job satisfaction and quality of care. Moreover, some participants reported the quality of care they deliver affects their satisfaction with their job.

The study found that most participants believe quality of care and patient safety are in the strategic priorities of the hospital. Moreover, the majority of participants reported the quality of care at their hospital is outstanding.

Data collected showed that job satisfaction is mostly affected by pay/compensation. Work environment and quality of care were also among the top three factors that affect nurses' job satisfaction. The study findings also revealed all the participants like the work they do, and almost all (93.8%) are satisfied with their work. The majority of participants reported their work performance is affected by job satisfaction.

Chapter 5: Conclusions, Discussion, and Recommendations

Introduction

The purpose of this study was to examine nurses' perception of the relationship between job satisfaction and quality of care nurses deliver, and barriers to a quality care. Moreover, the study examined factors that may influence nurses' job satisfaction.

The data for this study was collected by a print survey. An informed consent and an envelope were included with the survey during distribution. Volunteer participants were instructed to complete the survey and seal it before returning the completed survey. Completing and submitting the survey was viewed as given consent to collect data. Survey materials were distributed by charge nurses at the beginning of each shift and anytime volunteers requested for survey. Survey data collection was conducted September 22, 2015 through October 11, 2015. Of the 80 surveys distributed, 16 (20%) participants completed the survey. All participants were nursing staff working in a direct patient care at the hospital.

Limitations of the Study

There were few limitations to the study. Lack of demographic information of participants was a limitation to the study. The study had to exclude gender from demographic questions for the purpose of participant anonymity since some units might have a single male employee. This limitation limited the researcher comparing job satisfaction between different genders.

Another limitation to the study was the limited sample size (n=80) available for the study. In addition to the limited sample size, one of the significant limitations to the

study was the small survey response rate which was at 20%. This limited the researcher's ability to make any generalization out of the survey findings.

Lack of access to quality of care data at the hospital was also a limitation. The hospital keeps data of its care quality based on patient satisfaction and clinical outcomes. Lack of access to these data limited the researcher's ability to compare the survey findings with the real time quality data at the hospital.

Conclusions

Based upon findings, the researcher concluded that there was a positive correlational relationship between nurses' overall job satisfaction and quality of care they deliver. Work-load, staff-scheduling, stress, poor management, and inadequate training were factors that affect quality of care most.

The researcher also found that compensation/pay, work environment, stress, quality of care, employee benefits, and patient satisfaction to be affecting nurses' satisfaction with their work. Patient satisfaction was found to have a minimal effect on nurses' job satisfaction. The findings also showed stress to be a determining factor in both nurses' job satisfaction and delivery of quality care. It was also concluded that the quality of care nurses' delivered affected their satisfaction with their work. Finally, findings indicated that 93.8% of participants surveyed were satisfied with their work and 100% of them liked the type of work they do.

Discussion

Although the researcher was unable to locate a similar study that directly investigated nurses' perception of the relationship between job satisfaction and quality of care delivery, this study found that nurses' job satisfaction and quality of care are

positively correlated. All but one participant reported they were overall satisfied with their work and 81.3% reported the quality of care they delivered at the hospital was outstanding. Moreover, 87.6% of participants believed the quality of care they provided was affected by employee job satisfaction.

Data analysis revealed that all participants liked the type of work they do and 93.8% of them reported an overall satisfaction with their job. The satisfaction seemed to be a result of nurses' attitude towards their job.

The study found that work-load was the most reported factor to be affecting delivery of a quality care followed by staff-scheduling and stress. Of 16 participants, 14 (87.5%) reported work-load to be among the top three factors that affected the quality of care they deliver. Another study (Burke et al., 2012) found a significant negative relationship between staffing and hospital stay, suggesting that early recognition and treatment of potential adverse events led to earlier discharges.

According to the findings from the survey in this study, work environment was found to be one of the most determinant factors of care quality. A previous study (Aiken et al., 2008) found that mortality rate was 60% higher in hospitals with poorer care environments than those with better care environments. A previous study (Hinno, Partanen, & Vehvilainen-Julkunen, 2011) on Dutch nurses found a significant positive relationship between work environment and nurse-assessed quality of care.

Pay was found to be the most significant determinant of nurses' job satisfaction. Ten (62.5%) participants reported the pay they received among the top three factors that affect their satisfaction with their job. Work environment was rated as the second most significant determinant of job satisfaction.

Another finding of this study was the relationship between autonomy and job satisfaction. Fourteen (87.6%) participants reported they had autonomy to make decisions while 15 (93.8%) reported they were overall satisfied. Another study (Taylor, 2008) found that there was a positive relationship between perceived levels of autonomy and perceived level of job satisfaction.

Recommendations for Further Research

This study answered nursing staff's perception of the relationship between nurses' job satisfaction and quality of care delivery, perceptions of barriers to quality care delivery, and factors that affect nurses' job satisfaction. Based on the findings, the researcher recommends the following:

1. Hospital management should work towards improving employee job satisfaction as much as it does with patient satisfaction to improve the quality of care the hospital provides its clients.
2. Offering a competitive pay, improving nurses' work environment and implementing stress relieving strategies are recommended to maximize employee job satisfaction that in turn will improve care quality.
3. The study was based on nurses' perception. Access to hospital care records would have offered a detailed picture of the relationship between job satisfaction and care quality. Future studies may look further at patient clinical outcomes, patient satisfaction and other staff performances to evaluate the quality of care.

Recommendations for Health Education Practice

Based on the findings of the study, work environment and stress were found to be significant determinants of both employee job satisfaction and care quality. Health education can play a significant role in health promotion activities that target employees. Most employers' goal of funding worksite promotion activities focus on cutting insurance and costs related to employee absences. Health education practices at worksites should integrate strategies with the objective of improving job satisfaction that will result in improved performance.

References

- Agency for Healthcare Research and Quality. (2014). *Selecting health outcome measures for clinical quality measurement*. Retrieved from <http://www.qualitymeasures.ahrq.gov/tutorial/HealthOutcomeMeasure.aspx>
- Aiken, L., Busse, R., Griffiths, P., Kutney-Lee, A., Sermeus, W., Sloane, D., ...Tishelman, C. (2012). Patient safety, satisfaction, and quality of hospital care: Cross sectional surveys of nurses and patients in 12 countries in Europe and the United States. *BMJ*, *344* (1717), 1-14. doi: 10.1136/bmj.e1717
- Aiken, L., Cheney, T., Clarke, S., Lake, E., & Sloane, D. (2008). Effects of hospital care environment on patient mortality and nurse outcomes. *The Journal of Nursing Administration*, *38*(5), 223-229.
- Aiken, L., Clarke, S., & Sloane, D. (2002). Hospital staffing, organization, and quality of care: Cross-national findings. *Nursing Outlook*, *50*(5), 187-194.
- Aiken, L., Sloane, M., & Stimpfel, A. (2012). The longer the shifts for hospital nurses, the higher the levels of burnout and patient dissatisfaction. *Health Affairs*, *31*(11), 2501-2509. doi: 10.1377/hlthaff.2011.1377
- Allen, M. (2013). *How Many Die From Medical Mistakes in U.S. Hospitals?* Retrieved from: <http://www.propublica.org/article/how-many-die-from-medical-mistakes-in-us-hospitals>
- Alligood, M.R., & Burhans, L.M. (2010). Quality nursing care in the words of nurses. *Journal of Advanced Nursing*, *66*(8), 1689-1697.
doi: 10.1111/j.1365-2648.2010.05344.x
- Al-Mailam, F. (2005). The effect of nursing care on overall patient satisfaction and its

predictive value on return-to-provider behavior: A survey study. *Quality Management in Health Care*, 14(2), 116-120.

American Nurses Association. (2015). *Nurse staffing*. Retrieved from:

<http://www.nursingworld.org/MainMenuCategories/ThePracticeofProfessionalNursing/NurseStaffing>

American Nurses Association. (2014). *Nurse staffing plans and ratios*. Retrieved from:

<http://www.nursingworld.org/MainMenuCategories/Policy-Advocacy/State/Legislative-Agenda-Reports/State-StaffingPlansRatios>

American Nurses Association. (2014). *What is nursing?* Retrieved from:

<http://www.nursingworld.org/EspeciallyForYou/What-is-Nursing>

American Nurses Association. (2015). *Nurse staffing*. Retrieved from:

<http://www.nursingworld.org/MainMenuCategories/ThePracticeofProfessionalNursing/NurseStaffing>

American Public Health Association. (2014). *Health reform: Overview*. Retrieved from:

<https://www.apha.org/topics-and-issues/health-reform>

Anderson, E., Fong, E., Frith, K., & Tseng, F. (2012). Nurse staffing is an important strategy to prevent medication errors in community hospitals. *Nursing Economics*, 30(5), 288-294.

Averill, R., Eisenhandler, J., Fuller, R., Goldfield, N., McCullough, E., & Vertrees, J.

(2010). Achieving cost control, care coordination, and quality improvement through incremental payment system reform. *Journal of Ambulatory Care Management*, 33(1). doi: 10.1097/JAC.0b013e3181c9f437

Barriball, K., Lu, H., While, A., & Zhang, X. (2011). Job satisfaction among hospital

nurses revisited: A systematic review. *International Journal of Nursing Studies*, 49, 1017-1038.

Billikpof, G. (2006). Incentive pay (Pay for performance). Retrieved from:

<http://nature.berkeley.edu/ucce50/ag-labor/7labor/08.htm>

Bindman, A., Luft, H., & Mcnair, P. (2009). Medicare's policy not to pay for treating hospital-acquired conditions: The impact. *Health Affairs*, 28(5), 1485-1493.

doi: 10.1377/hlthaff.28.5.1485

Birkmeyer, J., Litwin, M., & Cooperberg, M. (2009). Defining high quality health care.

Urologic Oncology: Seminars and Original Investigations, 27, 411-416.

Brook, R., McGlynn, E., & Schuster, M. (2005). How good is the quality of healthcare in the United States? *The Milbank Quarterly*, 76(4), 843-895.

Brooks, J.A. (2015). Reducing hospital readmissions. A closer look at the Medicare

Hospital Readmissions Reduction Program. *American Journal of Nursing*. 115(1), 62-65.

Burke, C., Lewis-Voepel, T., Pechlavanidis, E., & Talsma, A. (2012). Nursing

surveillance moderates the relationship between staffing levels and pediatric postoperative serious adverse events: A nested-case control study. *International Journal of Nursing Studies*, 50(7), 905-91.

Carlsson, M., Engstrom, M., Lindqvist, R., & Ljunggren, B. (2006). Staff satisfaction

with work, perceived quality of care and stress in elderly care: Psychometric assessments and associations. *Journal of Nursing Management*, 14, 318-328.

Chang, W., Chiu, H., Lee, P., Lin, K., & Ma, J. (2009). Job satisfaction and perceptions

of quality of patient care, collaboration and teamwork in acute care hospitals.

Journal of Advanced Nursing, 6(9), 1946-1955.

Chang, W., Lee, P., Ma, J., & Yang, Y. (2009). Predicting factors related to nurse's intention to leave, job satisfaction, and perception of quality of care in acute care hospitals. *Nursing Economics*, 27(3), 178.

Chung, B., Eun-Jung, C., & Kwak, C. (2010). Relationship of job satisfaction with perceived organizational support and quality of care among South Korean nurses: A questionnaire survey. *International Journal of Nursing Studies*, 47, 1292-1298.

Clarke, S., Gunnarsdottir, S., Nutbeam, D., & Rafferty, A. (2007). Front-line management, staffing and nurse-doctor relationships as predictors of nurse and patient outcomes. A survey of Icelandic hospital nurses. *International Journal of Nursing Studies*. doi: 10.1016/j.ijnurstu.2006.11.007.

Cleary, D. & O'Kane, E. (n.d.). Evaluating the quality of health care. Retrieved from: http://www.esourceresearch.org/Portals/0/Uploads/Documents/Public/Cleary_FullChapter.pdf

Donabedian, A. (2005). Evaluating the quality of medical care. *The Milbank Quarterly*, 83(4), 691-729.

Franck, E., Timmermans, O., Van Bogaert, P., & Van Heusden, D. (2014). Nurse work engagement impacts job outcome and nurse-assessed quality of care: Model testing with nurse practice environment and nurse work characteristics as predictors. *Frontiers in Psychology*, 1261. doi: 10.3389/fpsyg.2014.01261

Gormley, D. (2001). Factors affecting job satisfaction in nurse faculty: A meta-analysis. *Journal of Nursing Education*, 42(4), 174.

- Hannan, S., Norman, I., & Redfern, S. (2002). Work satisfaction, stress, quality of care, and morale of older people in a nursing home. *Health and Social Care in the Community, 10*(6), 512-517.
- Harless, D., Herrera, C., Mark, B., & Spetz, J. (2013). Using minimum nursing staffing regulations to measure the relationship between nursing and hospital quality of care. *Medical Care Research and Review, 70*(4), 380-399.
- Heskett, J. (2011). *Why can't Americans get health care right?* Retrieved from: <http://hbswk.hbs.edu/item/6245.html>
- Hinshaw, A. (2008). Navigating the perfect storm. Balancing a culture of safety with workforce challenges. *Nursing Research, 57*(1), S4-10.
- Hinno, S., Partanen, P., & Vehviläinen-Julkunen, K. (2011). Hospital Nurses' work environment, quality of care provided and career plans. *International Nursing Review, 58*, 255-256.
- Kaprielian, V. & Wiseman, B. (2005). *How do you define quality?* Retrieved from: http://patientsafetyed.duhs.duke.edu/module_a/module_overview.html
- Kvist, T., Voutilainen, A., Mantynen, R., & Vehviläinen-Julkunen, K. (2014). *The relationship between patients' perceptions of care quality and three factors: Nursing staff job satisfaction, organizational characteristics and patient age.* Retrieved from: <http://www.biomedcentral.com/content/pdf/1472-6963-14-466.pdf>
- Licensed Practical Nurse. (2015). In *thefreedictionary.com*. Retrieved from <http://medical-dictionary.thefreedictionary.com/LPN>
- Lynn, M., Moore, K., & Morgan, J. (2009). Development and testing of the satisfaction

in nursing scale. *Nursing Research*, 58(3), 166-174.

McGillis Hall, L., Doran, D., & Pink, L. (2008). Outcomes of interventions to improve hospital nursing work environments. *Journal of Nursing Administration*, 38, 40-46.

Mortality Rate. (2015). In *oxford dictionaries.com*. Retrieved from:

http://www.oxforddictionaries.com/definition/american_english/mortality#mortality__9

Mrayyan, M. (2006). Jordanian nurses' job satisfaction, patients' satisfaction and quality of nursing care. *International Nursing Review*, 53, 224-230.

National Institute of Health. (2014). *Nursing Staffing and education linked to reduced patient mortality*. Retrieved from <http://www.nih.gov/news/health/feb2014/ninr-26.htm>

Nurse. (2015). In *merriam-webster.com*. Retrieved from: <http://www.merriam-webster.com/dictionary/nurse>

Peltier, J., Dahl, A., & Mulhern, F. (2009). *The relationship between employees satisfaction and hospital patient experiences*. Retrieved from: <http://www.infonow.com/typo3conf/ext/p2wlib/pi1/press2web/html/userimg/FORUM/Hospital%20Study%20Relationship%20Btwn%20Emp.%20Satisfaction%20and%20Pt.%20Experiences.pdf>

Registered Nurse. (2015). In *thefreedictionary.com*. Retrieved from <http://medical-dictionary.thefreedictionary.com/RN>

Reinhardt, U. (2001). *The United States healthcare system: Recent history and prospects*. Retrieved from:

http://www.hpm.org/Downloads/Reinhardt__U_The_US_HC_System_Recent_History_and_Propects.pdf

Ritter, D. (2011). The relationship between healthy work environments and retention of nurses in a hospital setting. *Journal of Nursing Management*, 19, 27-32.

Saari, M. L., & Judge, A. T. (2004). Employee attitudes and job satisfaction. *Human Resource Management*. Retrieved from

<http://www.utm.edu/staff/mikem/documents/jobsatisfaction.pdf>

Skill Mix. (2008). *A Dictionary of Nursing*. Retrieved from:

<http://www.encyclopedia.com/doc/1O62-skillmix.html>

Taylor, M. A. (2008). *The relationship between autonomy and job satisfaction among*

registered nurses (Order No. 1455018). Available from ProQuest Dissertations &

Theses Global; ProQuest Nursing & Allied Health Source. (304535547). Retrieved

from

<http://ezproxy.mnsu.edu/login?url=http://search.proquest.com/docview/304535547?accountid=12259>

Tewes, R. (2009). *Evolution of the health care system in the United States*. Retrieved

from http://www.lwvil.org/healthcare_EvolutionHealthCareUS.pdf

Thisted, R. (2006). *The cross-sectional study: Investigating prevalence and*

association [PowerPoint slides]. Retrieved from:

<http://health.bsd.uchicago.edu/thisted/epor/Lectures/061011-EPOR-CrossSection.pdf>

World Health organization (2006). *Quality of care. A process for making strategic*

choices in health systems. Retrieved from:

http://www.who.int/management/quality/assurance/QualityCare_B.Def.pdf

Appendices

Appendix A

Institutional Review Board Approval Letter



September 14, 2015

Dear Mark Windschitl, PhD:

Re: IRB Proposal entitled "[289811-5] Relationship Between Nurses' Job Satisfaction and Quality of Healthcare They Deliver"
Review Level: Level II

Your IRB Proposal has been approved as of September 14, 2015. On behalf of the Minnesota State University, Mankato IRB, we wish you success with your study. Remember that you must seek approval for any changes in your study, its design, funding source, consent process, or any part of the study that may affect participants in the study. Should any of the participants in your study suffer a research-related injury or other harmful outcome, you are required to report them to the Associate Vice-President of Research and Dean of Graduate Studies immediately.

When you complete your data collection or should you discontinue your study, you must submit a Closure request (see <http://grad.mnsu.edu/irb/continuation.html>). Please include your IRBNet ID number with any correspondence with the IRB.

Sincerely,

A handwritten signature in black ink that reads "Mary Hadley".

Mary Hadley, Ph.D.
IRB Coordinator

A handwritten signature in black ink that reads "Julie A. Carlson".

Julie Carlson, Ed.D.
IRB Co-Chair

A handwritten signature in black ink that reads "Jeffrey Buchanan".

Jeffrey Buchanan, Ph.D.
IRB Co-Chair

Appendix B

Consent Form for Study Participants

SURVEY CONSENT

You are requested to participate in research supervised by Dr. Mark Windschitl on relationship between nurses' job satisfaction and quality of care delivered. The goal of this survey is to understand what nurses perceive about the relationship between job satisfaction and quality of care delivered. If you agree to participate, you will be asked to answer questions about that topic. All of your information will be kept private, and can be viewed only by authorized research staff members. The survey takes approximately 15 minutes to complete. If you have any questions about the research, please contact Dr. Windschitl at mark.windschitl@mnsu.edu.

Participation is voluntary. You have the option not to respond to any of the questions. You may stop taking the survey at any time. Participation or nonparticipation will not impact your relationship with Minnesota State University, Mankato. If you have questions about the treatment of human participants and Minnesota State University, Mankato, contact the IRB Administrator, Dr. Barry Ries, at 507-389-2321 or barry.ries@mnsu.edu.

Responses will be anonymous. The risks of participating in this research are no more than are experienced in daily life. None of your answers will be released and no names will be recorded. Survey forms will be stored for three years at a secured location in Minnesota State University, Mankato. Survey forms will be destroyed after three years. Participating in this study will help the researchers better understand the relationship between nurses' job satisfaction and quality of care delivered.

There are no direct benefits for participating. Society might benefit by the increased quality of healthcare.

Submitting the completed survey will indicate your informed consent to participate, and indicate your assurance that you are at least 18 years of age. If you would like a copy of the consent form, remove this one from your survey and take it with you.

MSU IRBNet ID#: 289811

Date of MSU IRB approval: September 14, 2015

Appendix C
Survey Questionnaire

The relationship between Nurse's Job Satisfaction and Quality of Care

Please write your work unit: NA	Circle your License: RN LPN
------------------------------------	--------------------------------

Your response will be kept anonymous.
Your participation is greatly appreciated.

Please indicate how much you agree or disagree by circling your best answer for each question.

#		Strongly agree	Agree	Neutral	Disagree	Strongly disagree
1	Overall, I am very satisfied with my work.	5	4	3	2	1
2	I feel valued at this hospital.	5	4	3	2	1
3	I am proud to work for this hospital.	5	4	3	2	1
4	I have autonomy to make decisions I need to accomplish my tasks.	5	4	3	2	1
5	My physical working conditions are good.	5	4	3	2	1
6	My good work is recognized appropriately.	5	4	3	2	1
7	I believe my job is secure	5	4	3	2	1
8	I feel part of the team I work with.	5	4	3	2	1
9	I like the type of work I do.	5	4	3	2	1
10	I like the people I work with.	5	4	3	2	1
11	I feel I can trust what I am told by the management staff.	5	4	3	2	1
12	Quality is a top priority at this hospital.	5	4	3	2	1
13	The quality of care at this hospital is outstanding.	5	4	3	2	1
14	My performance is affected by my job satisfaction.	5	4	3	2	1
15	I believe the quality of care we provide is affected by employee job satisfaction.	5	4	3	2	1

16	Patient Safety is a top priority at this hospital.	5	4	3	2	1
17	I feel that my supervisor gives me adequate support.	5	4	3	2	1
18	My manager/supervisor treats me with respect.	5	4	3	2	1
19	I am given a timely feedback on my performance.	5	4	3	2	1
20	I am provided with adequate equipment to accomplish my task.	5	4	3	2	1
21	I am provided with adequate training to accomplish my task.	5	4	3	2	1
22	I am fairly compensated for my work.	5	4	3	2	1
23	The hospital offers me a good benefits package.	5	4	3	2	1
24	I would recommend employment at this hospital to my friend.	5	4	3	2	1

25. How long do you plan to continue your employment at your current employer? (check one)

Up to 1 year
years

2 to 5 years

6 to 10 years

More than 10

26. Of the factors listed below, what influences your satisfaction with your job? Please circle the top three.

Stress

Management

Work Environment

Pay

Benefits Package

Patient Satisfaction

Quality of Care Provided

Other

27. Of the factors listed below, which affects the quality of care at this hospital most?

Stress

- Work load
- Poor management
- Unsafe work environment
- Inadequate training
- Work-life imbalance
- Staff scheduling
- Other

28. Please tell us what this hospital can do to increase your satisfaction as an employee.

The following questions are for statistical use only. The information will not be used to attempt to identify individuals. This section is optional, but would help in the analysis of the data.

1. Your Age: _____
2. Years on present position with this employer: _____