PATIENT RATINGS OF THE QUALITY OF HEALTHCARE IN SASKATCHEWAN HOSPITALS

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By

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ABSTRACT

Patients are the recipients of the provision of healthcare and an invaluable source when evaluating the quality of healthcare provided in our hospitals. There is limited research evaluating patient perceptions of overall quality of healthcare. A larger study "Convergence and Divergence in Perspectives in Quality" represented the first Saskatchewan effort to explore patient perceptions and what aspects patients indicate as important when evaluating the provision of quality of care. In the larger study, patients hospitalized with one of four tracer conditions (cerebral vascular accident, myocardial infarction, prostate disease and hysterectomy) were surveyed about their involvement in and satisfaction with the provision of healthcare. The present study, using a data subset of the larger study, specifically explored patient's perceptions on their involvement in decision-making, feelings of being well informed of one's medical condition, and sources of health information. These perceptions were correlated with the overall ratings of quality of care. Findings indicated a moderately high overall rating of quality of care. Increased involvement in decision making regarding medical care and options for treatment, and the feelings of being fairly or well informed were associated with higher ratings of overall quality of care. While few of the correlations reached greater than moderate effect, it is still clear that opportunities for patients' participation in decisions related to their medical care and patients' feelings of being fairly or well informed contributed to overall perceptions of quality of care. The majority of patients preferred their doctor or nurse to provide information about their medical condition, thus indicating the human touch is still preferred. Nurses can use these results to advocate for time to ensure patients have access to correct information and are included in decisions about their care.

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CHAPTER ONE

INTRODUCTION AND LITERATURE REVIEW

Introduction

Patients are the recipients of the provision of healthcare and an invaluable source of information when evaluating the quality of healthcare provided in our hospitals. There is limited research evaluating patient perceptions of overall quality of healthcare. A larger study "Convergence and Divergence in Perspectives in Quality" represented the first Saskatchewan effort to explore patient perceptions on the quality of the care received in hospital and the factors patients indicate as important when evaluating the provision of care. In the large study, patients hospitalized with one of four tracer conditions (cerebral vascular accident, myocardial infarction, prostate disease and hysterectomy) were surveyed about their involvement in and satisfaction with the provision of healthcare. The present study, using a subset of data from the larger study, explored factors related to patient responses to on their involvement in decision-making, feelings of being well informed of one's medical condition, and sources of health information, and correlated those with the overall ratings of quality of care.

Statement of the Problem

What constitutes quality of care has been debated by many. Few of the studies in the current literature defined quality of care, rather, they identified areas of quality of care. For example, one definition of quality of care by Kohn, Corrigan and Donaldson (2000), is 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. 211). For the purposes of this study quality of care is defined by Downie, et al. (2006), as achieving excellence in the provision of care. Excellence is obtained through the provision of care that exceeds patient's expectations and is tailored to meet individual needs. To achieve excellence, patient safety measures must be maintained and healthcare providers must practice with evidence based medical knowledge. Downie and colleagues' definition was selected as being the most

comprehensive definition involving patient safety, evidenced based research and consistent with patient's expectations are met, thus ensuring individual needs are met.

The provision of high quality health care is expected by patients and is the professional obligation of health care providers (Lynn, McMillian, & Sidani, 2007). Typically, studies that have explored quality in the provision of healthcare have evaluated the opinions of healthcare professionals. As healthcare providers and patients have different roles in the health care system, it is important to note that there may be considerable differences between their perspectives on quality care (Ramsay, Campbell, Schroter, Green, & Roland, 2000). Healthcare providers have limited insight into how patients view the provision and acceptance of health information (Durieux, Bissery, Dubois, Gasquet, & Coste, 2008). However, a limited amount of research has explored the perspectives of patients as the consumers in the healthcare system; therefore it may be beneficial to further examine this area when evaluating healthcare services.

Evaluation of patient perspectives of care serves many purposes. Evaluation provides a greater understanding of the patients' perspective, assists in identifying areas of improvement, and provides a means of evaluating outcomes of care (Petterson, Veenstra, Guldvog, & Kiolstad, 2004). Gaining the patients' perspectives may result in better health outcomes, as patients who report feelings of satisfaction with care are more likely to follow recommendations for ongoing care (Spence Laschinger, McGillis Hall, & Almost, 2001). In addition, gaining the patients' perspective enables increased patient involvement which may increase their awareness about the importance of quality of care, therefore enhancing their commitment to maintaining the expectation of quality of care (Lamb, Mowinski-Jennings, Mitchell, and Lang, 2004).

Our hospitals have faced many challenges in past decade that have affected how healthcare has been delivered (Spence Laschinger, McGillis Hall, & Almost, 2001). Social changes that impact quality of care include the aging populations, increased medical advances leading to increased comorbidities, and higher patient expectations (Irurita, 1999). At the same time there have been many changes within the Canadian healthcare system that have affected the provision of high quality care. Some of these system changes include early discharge, rising costs in a context of limited

resources and a shortage of health care staff, coupled with increased use of casual and temporary staff. These changes continually challenge our healthcare system and the provision of high quality healthcare (Irurita & Williams, 2001). Gaining the patient perspective will assist in evaluating the current level of care that is provided on specific units within the hospitals given the above challenges in healthcare delivery.

The healthcare system is facing many stressors, including high costs (Irurita & Williams, 2001). Increased research in the area of quality of care will assist in bridging gaps in knowledge about how care is provided by identifying areas requiring improvement. Research in this area will provide more information, allowing a macro view of patient care. Finally, research will aid healthcare sectors to implement strategies that result in superior improvement and increase the effective utilization of fiscal resources.

There is limited research that evaluates the perspective of the patient as well as research that identifies the patient's perspective of what constitutes high quality of care. Canadian research is needed in this area to accurately evaluate the provision of care. Baker states "the benefits between research and practice are likely to be synergistic", (2006, p.150). As more research about patient's perceptions on the quality of their care is generated, there will be a positive effect on the provision of increased quality of healthcare provided.

Relevance and Significance

The MERCURi study is the first quality of care study situated in Saskatchewan. This study is important as the data collected enables researchers to examine quality of care from multiple perspectives, including the perspectives of patients. The MERCURi study provided baseline data and evaluated what patients described as important factors in receiving high quality care. Based on the literature review, several factors were identified for testing in this study. The factors chosen for comparison were: involvement in decision making, feelings of being poorly fairly, or well informed, the preferred source of information and overall satisfaction with care. This study, a beginning exploration of patient perceptions, provides guidance for future research and evaluation of implemented changes.

Literature Review

To examine the literature surrounding patient perceptions of quality of care received in hospitals, a search was completed using the MEDLINE OVID and CINAHL databases. Key words searched were quality of care, patient satisfaction, access to information, informed, decision making, patients, adult, in-patient, out-patient, stroke, hysterectomy, myocardial infarction and prostate disease. The search was limited to research that incorporated patient surveys, patient involvement in decision making, patient knowledge, or preferred source of obtaining information. The search included research studies involving adults and written in the English language.

A search for Canadian studies that only examined 'quality of care' within the publication years of 2000 to 2009 resulted in one item. When the publication year was extended to 1990 to 2009, 62 items were identified. Using the terms 'quality of care' and 'patient satisfaction' together resulted in zero items. Due to this limitation, reported studies from other countries were included in the review. Then a search was completed utilizing the above mentioned search terms in various combinations. In terms of the tracer conditions, myocardial infarction produced the least items when searched with quality of care, patient satisfaction, and decision making. Because the literature related to quality of care and any of the four tracer conditions (cerebral vascular accident, myocardial infarction, prostate disease and hysterectomy) was so limited, the search was expanded to any medical diagnosis. One hundred forty-one studies were reviewed and approx 37 studies were identified as well as a Canadian commentary and a Health Canada report. The commentary was included because it was the only Canadian article that explored the quality of Canadian healthcare and importance of Canadian research in this area. The Health Canada report examined relevant areas of patient safety. Seven studies were U. S. based, five Canadian based, four from the United Kingdom, three from Australia, two from the Netherlands, and two from Norway. One study from each of France, Sweden, Taiwan, Denmark, Sweden, Britain, Finland, and Korea were identified, and one multi-site European study was included.

Involvement in Decision-making and Patient Satisfaction

Traditionally, doctors were seen as the decision makers with patients expected to be silent and compliant. In the past 10 years, this has changed. Patients have been encouraged to be active in their care and in decision making. Research has suggests that the majority of patients prefer taking an active role in decision making or being asked their opinion (Purbrick, Tu, & Demato, 2006; Sainio, Lauri & Eriksson, 2001). Encouraging patients to take a more active role in decision making may promote positive health outcomes. Studies within the U. S. have reported that increased involvement in medical care has resulted in increased patient satisfaction, coping, health status, and self management with healthcare (Baker, 2006; Bastiaens, Royen, Pavlic, Raposo, & Baker, 2007; Eldh, Ekman, & Ehnfors, 2006; Harvey, 1999; Purbrick, Tu, Demato, 2006). Patients with high levels of satisfaction are more compliant with following their treatment plans (Spence Laschinger, McGillis Hall, & Almost, 2001).

Factors Affecting Patient Involvement.

Many factors affect the patient's ability to participate in decision making in their medical care. Patient involvement may be affected by age, severity of health condition, level of education, psychosocial condition, level of knowledge of condition, cultural assumptions of normal behavior, and opportunities presented for involvement (Bastianens et al., 2007; Becker, & Douglas, 2008; Eldh, Ekman, & Ehnfors, 2006; Harvey, 1999; Entwistle, Williams, Skea, MacLennan, & Bhattacharya, 2006; Sainio, Lauri, Eriksson, 2001). As well, organizational culture and staff satisfaction may be factors that indirectly contribute to the willingness of health professionals to encourage patients to participate in decision making (Tzeng, Ketefian, & Redman, 2002).

The willingness and level of involvement in decision making may differ with each patient. This may be attributed to differing perspectives of each patient. Some patients may not want to take responsibility and make decisions about their healthcare. They may feel it not up to them and that is the responsibility of the healthcare professional. Others may want to ensure their opinions and suggestions are being considered (Bastianens et al., 2007).

The patient's level of knowledge may impact their patient's willingness to partake in decision-making and improve overall satisfaction with the quality of care received. Sainio, Lauri & Eriksson (2001) found, "Patient access to adequate and comprehensible information was considered to be an important precondition for participation" (p. 102). Patients who receive and participate in opportunities to be involved in decision making regarding their medical condition may increase their perceived overall satisfaction with care (Harvey, 1999).

Provider Interactions and Patient Satisfaction

Interactions between the healthcare provider and the patient can inhibit or increase patient participation in healthcare and perceived level of satisfaction with quality of care (Eldh et al., 2006; Entwistle et al., 2006; Irurita, 1999; Sainio et al., 2001; Schimdt, 2003; Thorsteinsson, 2002). Factors that may be important in the promotion of active involvement in decision making include providing information that is relevant to individual needs, the manner the information is presented, and allowing adequate time for providing and obtaining necessary information to and from the patient.

For example, the amount of information provided to patients can vary due to limited interactions with the patient. Nursing shortages and early discharges can greatly affect the amount of time spent with a patient. A limited time spent with a patient may result in less information that can be imparted and decrease the patient's desire to participate in decision making within about their own medical care (Irurita & Williams, 2001). With increased interaction time, the healthcare provider is able to gain an understanding of the patient's level of knowledge deficits, make an assessment to ensure information provided is understood, and promote individualized care. Ensuring the patient believes nursing staff has listened to them, are respectful, see them as an individual patient and tailor their care based on this, will hopefully result in the patient perceiving that their care has been individualized to their unique situation. The perception of care as individualized for each patient could enhance their views on the quality of the care and increase patient participation in decision making surrounding care.

Quality of Information and Patient Satisfaction

Patients need to have accurate information provided to them and to feel knowledgeable about their condition, treatment and care. Accurate information will increase their involvement in decision making and the patient will be able to make sound and valid decisions regarding their care. Patients often view not receiving an adequate amount of information as difficult and researchers have found it affects patient's perceived level of satisfaction (Sainio et al., 2001). Studies have reported that patients would like more information on non technical aspects of care (Durieux, Dubois, & Bissery, 2004). When providing information, it is important to determine if the information provided is relevant for the patient. Providing information that is relevant and meets the patient's expectations may influence overall perceived levels of satisfaction with care and their willingness to be involved in decision making about their care.

Sources of Information

Earlier discharges from hospitals, longer life expectancies, and higher number of individuals living with chronic illnesses increase the need for accessible and accurate information to facilitate self-care at home (Cowan & Hoskins, 2007). Due to advances in technology, patients are able to obtain medical information from a variety of sources. In the past, patients relied largely on healthcare professionals to provide information on their medical conditions. Traditionally, health care professionals provided brochures and recommended books to provide patients with additional knowledge regarding their medical conditions. Family, friends, television, and magazines are other sources that patients may have utilized to obtain information.

More recently, the Internet has become widely accessible and offers a wealth of health information to patients. A study completed in 2004 found, "52 million American adults relied on the Internet in 2000 to make health decisions" (Proude, Shouriw, Conigrave, Wutzke, Ward, & Harber, p.304). This trend continues to increase as computers become more common in our homes (Purbrick et al., 2006). Patients who utilize the Internet for health information is increased in English speaking countries (Boer, Versteegen & Van Wijhe, 2007). Despite the growing numbers of patients who

utilize the Internet as a source for medical information, many patients still prefer the healthcare provider to be the main and most trusted source of information (Cowan & Hoskins, 2007; Hubbard, Sharpe, Brandt, & Robertson, 2007).

The younger population appears to be more assertive when receiving healthcare and are more apt to seek out information on their medical information. Often younger and highly educated patients utilize the Internet for information (Proude, et al. 2004). Patients who regularly access the Internet for information on their condition and options for care may be more knowledgeable and this may impact their expectations in the level of decision making (Entwistle et al., 2006). These patients' may be more apt to expect a higher level of information to be provided and be actively involved in decision making.

There are many sources of information available on the Internet: some of which are more credible than others (Cowan & Hoskins, 2007; Boer et al., 2007). Patients may not be able to decipher the quality of information presented on the Internet. It has been suggested that less than half of all patients discuss information found on the Internet with their healthcare provider (Entwistle, et al, 2006). If patients do not fully understand or are unaware that some of the information they are accessing may be inaccurate, it may affect their contribution to decision-making. Consequently, the patient's involvement in decision making regarding their care may influence the perceived level of the quality of the care provided. Given these trends more research is needed to determine the preferred source of information and the effect information sources have on patient expectations of healthcare providers.

Each patient may have different information needs. A patient's personality may influence the amount of information that is being sought. Some may want more information on their medical condition than others, which may be beneficial to some patients and harmful to others. Further, the amount of information presented may impact on the patient's coping mechanism either negatively or positively (Cowan & Hoskins, 2007). Therefore healthcare staff may need to tailor information for each patient to meet their individual needs.

Support groups and volunteers are two sources of information that were not discussed in the identified studies.

Therefore, the number of patients who utilize these sources for information and whether they are preferred are sources

are relatively unknown. The access to and use of support groups or volunteers would be an interesting area for future research.

Use of Patient Perceptions

The majority of research on patient's perceptions about the quality of their care has occurred in countries outside of Canada. Therefore, transferability of the results of this body of evidence is questionable for the Canadian healthcare system. It is essential to complete research within our healthcare system to effusively evaluate the quality of care and provide useful findings that can be incorporated in to the provision of care.

Much of the previous research in this area has utilized methods that evaluated the healthcare provider's view of quality of care (Spence Laschinger, McGillis Hall, Pedersen, & Almost, 2005). It is important to note that what constitutes high quality of care from a patient's perspective can differ from a healthcare provider's perception (Lee, & Yom 2006; Mathiesen, Willaing, Freil, Jorgensen, Andreasen, Ladelund, & Harling, 2007; Thorsteinsson, 2007. However, further research is required to fully determine the extent of the differences and the effect on quality of care.

In the past decade, there has been an increased awareness in promoting safe, quality care. Lamb and colleagues state "Consumer's have not been adequately involved in the quality movement" and "strategies are needed to encourage national debate on quality of health care from the patient's perspective" (2004, p. 62). Involving the patient and evaluating the patient's perceptions of care may assist in promoting and maintaining the provision of high quality care in Canadian hospitals.

In addition, studies using patients as sources of data only examined one aspect of patient perceptions of quality care. As discussed earlier, patient perceptions, knowledge levels, involvement in decision making, and preferred source of information, while examined, were not examined in relation to each other and the effects on the overall quality of care. Examining these areas more in depth will assist health care organizations in identifying what patients perceive as important elements of quality care and an overall patient rating of quality of care. Therefore, organizations should be

able to identify what is required to improve and maintain high standards for care, resulting in the provision of high quality care.

It is the patient who can best assess the care received, determine the quality of that care and communicate a level of satisfaction (Lynn, McMillen & Sidani, 2007; Schmidt, 2003). The evaluation of quality of healthcare is complex and multidimensional. Studies examining patient satisfaction with care have been conducted and found to positively correlate improved health status. However, a patient's health status may directly impact the patient's level of satisfaction. It has been suggested that there is no correlation between interpersonal and technical areas of care (Chang et al., 2006). However, providing simple satisfaction ratings does not guide healthcare staff in specific directions to improve the quality of care, and patient preferences may change over time (Ervin, 2006). The extent of each of these areas has not been evaluated to determine how they affect the patient's perceived view of quality of care.

There may be areas that affect patient satisfaction that are not related to the care received. For example while in the hospital a patient might be prescribed a medication that is not covered by their health insurance plan. This increases the cost of medication for the patient has been reported to indirectly effect the patients' level of satisfaction with their care (Lepnurm, Dobson & Backman, 2003).

Does Patient Satisfaction Indicate Quality Care?

Some research indicates that measures of patient satisfaction are not effective methods to evaluate the quality of care (Barlesi et al., 2005). Optimally, measuring patient satisfaction should be performed in conjunction with other evaluative methods. The development of surveys used to evaluate patient perspectives on satisfaction with care have been debated in the literature and scrutinized on the basis of validity (Howell et al., 2007; Wensing & Elwyn, 2003). There has been no unified approach to the measurement of patient satisfaction with care (Labarere, Francois, Auquier, Robert, & Fourny, 2001). This may be attributed to the lack of a consistently applied definition of the term patient satisfaction and the numerous components involved in exploring satisfaction from the patients' perspective (Howell, et

al. 2007; Garralt, Bjaertnes, Krogstad, & Gulbrandsen, 2008). Further, patient satisfaction is an abstract concept that can be difficult to measure, as it is not directly observable (Labarere, François, Auquier, Robert, & Fourny, 2001).

Culture, age, gender, and life experiences are factors that may influence a patient's view of what constitutes as a satisfactory experience (Barlesi, Boyer, Doddoli, Antoniotti, Thomas, & Auquier, 2005). A patient may determine what aspects are important in quality of healthcare based on individual experiences, which may not reflect the general population's view of quality of care (Wensing & Elwyn, 2003). Therefore, what one patient defines as being satisfactory may be something completely different to another patient.

When asking patients to evaluate the overall quality of care, some patients may identify technical aspects of care as being the most important, others may view interpersonal communication as the most important aspect required, others may view interpersonal communication as the most important, others may view interpersonal communication as the most important aspect required, and yet others may look at all areas as being crucial in the provision of quality of care. Some research suggests that these areas should be evaluated independently of each other and overall quality ratings should not be used (Chang et al., 2006). Additionally, the timing of retrieving the data may have an influence on patient satisfaction: whether the data is obtained before discharge or after discharge (Tzeng et al., 2002). A patient's health status may improve or deteriorate significantly during hospitalization, and after discharge, which may impact the patient's responses and level of satisfaction. Other studies have suggested that satisfaction questionnaires should include a method to measure the patient's physical health status. Patients with better physical health are more apt to report higher levels of satisfaction (Chang et al., 2006). The timing of retrieving the data may have an influence on patient satisfaction, whether the data is obtained before discharge or after discharge (Tzeng, Ketefian, & Redman, 2002). A patient's health status may improve significantly during hospitalization, and after discharge, which may impact the patient's responses and level of satisfaction.

Some patients may find it difficult to report negative aspects of care. This could be due to multiple factors.

Patients could be worried about affecting the care given to them if their concerns offend their care. Some studies have

found that the patients protect the nurses by not complaining about unsatisfactory healthcare, making justifications for the care they received, or trying not to be demanding when the nurses are busy (Irurita & Williams, 2001)

None of the identified research studies have discussed the impact of the patient's mental health status on the level of satisfaction with care. It was assumed that patients with severe mental health issues would be excluded from studies.

Other Concerns in Research on Patient Satisfaction

Sample size is a concern for the validity and transferability of research findings. Many of the studies reviewed from other countries involved small samples of 100 participants (Cheng-Chen, Tsorng-Yeh, Chi-Chen, Shu-Shan, Li-Fang, 2006; Cowan & Hoskins, 2007; Ervin, 2006; Irurita, 1999; Irurita, & Williams, 2001; Purbrick, Tu, & Damato, 2006; Sainio et al., 2001; Schimdt, 2003; Thorsteinsson, 2002). Smaller sample sizes were most often due to low response rates. Increasing the sample size in studies on patient perceptions about the quality of their care may provide valuable information that is transferable to the larger population.

Two significant issues in research involving patients are ethical approval and compliance with legislation protecting patient privacy. Obtaining ethical approval varied in the studies reviewed which can be attributed to the differences in process of ethical approval in research conducted in countries other than Canada. Some studies gained ethics approval from local ethics committees (Cowan & Hoskins, 2007; Eldh et al., 2006; Sainio et al., 2001; Schimdt, 2003). Cheng-Chen, C et al., (2006) obtained ethics approval from the research division of each hospital. One study did not require ethics approval (Purbrick, Tu, & Damato, 2006) and other studies did not state if ethics approval was sought (Irurita, 1999; Thorsteinsson, 2002).

Method

The inclusion criteria of the larger study consisted of adult patients (age 18 and older) hospitalized with one of the four tracer conditions. The tracer conditions myocardial infarction, prostate disease, hysterectomy, and cerebral vascular incident were selected as part of an index of quality developed by Lockhart (2007), which is based on health

indicators developed by the Canadian Institute for Health Information (CIHI, 2010). The goal for the development of these tracer conditions was to provide a framework to measure health outcomes, and quality of care (CIHI, 2006). Establishing clearly defined indicators assists in measuring and evaluating performance of the delivery of healthcare in Canada (Lockhart, 2007), which is needed to develop effective strategies to improve the quality of healthcare. Patients who were admitted on a medical, surgical, or obstetrical ward in one of three hospitals located in Saskatoon, Saskatchewan were approached to determine willingness to participate in the larger study. The research assistant reviewed the intents of the study and if the patient was interested in participating in the study, signed consent was obtained. Patient data were collected by this researcher and other MERCURi research assistants from January to May 2009. Most surveys were completed independently by the participant. However, five surveys were completed by the patient and the caregiver. The sample consisted of 378 patients, resulting in a 95% response rate. Participant characteristics are presented in the manuscripts and listed in the survey document can be found in Appendix A.

Measures

Survey items to answer the specific research questions for this study were developed and integrated into the larger study instruments (see Appendix A). Several surveys were developed for the larger study to evaluate perceptions of various categories of healthcare staff and patients. The Patients' Perspectives on Managing Quality of Care scale was utilized to examine patient perceptions and resulted in Cronbach's α = .930. A reliability coefficient of .70 or higher is considered acceptable, thus indicating strong confidence in the results (Fields, 2009). The patient survey was developed using the scales of Lepnurm, Dobson & Backman (2003), and expertise of the staff at the MERCURi Research Group and incorporated the questions for the analysis in this study.

A copy of the survey document can be found in Appendix A. The questions from the larger study that were used for this study are outlined below:

1) How well informed are you about your medical condition and the treatments available?

Rating scale: Very poorly = 1, poorly = 2, fairly = 3, highly = 4, and very highly = 5

2) How involved are you in discussing and deciding your treatments with the doctor?

Rating scale: 1=Doctor does not listen and decides, 2=After listening doctor decides, 3=I offer my views then doctor decides, 4=We discuss my views then doctor decides, 5=We discuss situation and both decide, and 6=We discuss situation and I decide.

3) Where did you obtain the most useful information about the medical condition that you have?

Rating scale: Doctor, nurse, hospital, health unit, family, relatives, friends, Internet, TV, magazines, or pamphlets.

4) Having considered the quality of care provided to you by doctors and nurses please indicate your assessment of the overall quality of care provided to you on this unit, using the following standards;

Rating scale: Don't know, 0, 10, 20, 30, 40, 50, 60, 70, 80, 90, 100.

(0 being the non-functional, 10 to 40 = terrible to poor, 50 to 60 = passable or adequate, 70 to 90 = good to excellent, 100 = perfect).

The scales utilized for each of the questions provided a means to gain patient perceptions in each of the specific areas. A five point Likert scale was utilized to capture the patients' view on how informed they are about their medical care and options for treatment. The choices ranged from very poorly, to very highly. Patients were provided with six choices to indicate their involvement in decision making of their medical care and treatment options with their Medical Doctor. Since there is varying degrees of patient involvement, several choices were available to ensure each patient was able to accurately indicate his/her involvement in decision making in relation to their medical care. Due to the multitude of sources of information, eleven options were available for patients to indicate their preferred source or sources of information. Patients often access more than one source for information on their health condition, thus they were able to indicate more than one source of preferred information on the survey. In addition, patients were asked to indicate their perception of the overall quality of care received on the hospital unit using a scale of 0 to 100. A large range scale was chosen to increase the accuracy in the response to this item and increase the item sensitivity.

Ethical Considerations

The larger study received approval from the Saskatoon Health Region and the University of Saskatchewan. Operational approval from the Saskatoon Health Region was granted, which included approval from each of the involved nursing unit managers at St. Paul's Hospital, Royal University Hospital, and City Hospital. As this study is a subset of the larger ongoing study, and covered by the larger ethics approval, a certificate of exemption was received (Appendix B). This researcher assisted in the development of the ethics submission for the larger study. In addition, this researcher only had access to data from the questions identified as related to patient perceptions about the quality of care. The data contained no patient identifying information. A research officer was hired through the Saskatoon Health Region to oversee the data collection, ensure compliance with confidentiality, and the Health Insurance Portability Information Act (HIPA, 2006) agreement.

This was a voluntary study employing pen-and-paper questionnaires. Information about the voluntary survey was posted on the nursing units. Healthcare staff notified the research group of patients who met the inclusion criteria and were interested in participating in the study. A member from the study group met with each patient volunteer and reviewed the intents of the study prior to obtaining written consent for information gathered with the survey tool.

Study Hypotheses

The following hypotheses were explored in the analysis of the data.

Hypothesis #1

Patients who indicate ratings of "we discuss my views then doctor decides", "we discuss situation and both decide", and "we discuss situation and I decide" will result in higher ratings of overall satisfaction of quality of care and a Pearson's correlation greater than $r = \ge .50$ is expected.

Hypothesis #2

Patients indicating they obtain information about their medical condition from their nurse or doctor will also indicate higher levels of overall satisfaction with quality of care.

Hypothesis #3

Patients indicating ratings of retrieving information from family, friends, relatives, Internet, television, magazines or pamphlets will indicate low levels of overall satisfaction with quality of care (ratings between 0 and 30).

Hypothesis #4

Patients who indicate decreased involvement in medical decision making will in result feelings of being poorly informed and report lower overall ratings of quality of care. Therefore, a strong correlation $(r \ge .6)$ is expected with these three factors.

Hypothesis #5

Patients who indicate the preferred source of information is the doctor or nurse will report higher ratings of overall quality of care, indicate feelings of being fairly or well informed, and indicate increased involvement in decision making in relation to their medical condition of $(r \ge .6)$.

Analysis

Descriptive statistics for the age of the patients, ratings of overall quality, and decision making regarding their medical care were completed using PASW Statistics 17 for Windows. Comparative analyses were conducted using Pearson's Product Moment Correlation. Pearson's Correlation measures the strength or covariance of the linear relationship between two variables (Kinnear, & Gray, 2010). The Pearson correlation coefficient (r) is a mathematical index of the relationship between two variables. Kinnear and Gray describe, "The value of r can vary within the range of -1 to 1 inclusive" (p.397). A value of the coefficient r >.1 is considered trivial, .1 to .3 is considered a small effect, .3 to .5 is considered a medium effect, .5 and greater is considered a large effect. A result of 0 indicates no relationship between the variables. A negative value indicates a negative relationship and a positive value indicates a positive relationship (Field, 2009). In addition, cross tabulation was utilized to "inspect a bivariate distribution in order to ascertain the presence of an association between the variables concerned" (Kinnear & Gray, p. 414). This allowed for

further exploration to determine where the characteristics of one variable and the characteristics of another variable occur together.

Summary

In conclusion, we know that evaluating patients' perceptions of quality of healthcare is needed when determining the overall satisfaction of care received in our hospitals. There is a large deficit of Canadian research in the areas of quality of care and patient satisfaction. To date, a definition of satisfaction of care has not been identified or agreed upon, due to the multidimensional areas associated with patient satisfaction. This study provided information on areas that are viewed as important when evaluating patient ratings of quality of care. In addition, it will provide a baseline of the perceived level of satisfaction when evaluating the provision of quality of healthcare from a patient's perspective and set the stage for further research.

CHAPTER TWO FINDINGS

INTRODUCTION

The findings of the study are presented in two manuscripts. The first manuscript "Patient Ratings of the Quality of Healthcare in Saskatchewan Hospitals" describes the results of patient involvement in decision making in relation to their medical care, and rating of the overall quality of care received. Patients indicated a moderately high overall rating of quality of care. A majority of patients indicated some involvement in their medical care decision-making. This manuscript has been formatted according to the requirements for the Canadian Journal of Nursing Research.

The second manuscript, "The Human Touch is Still Preferred," identified patients' preferred sources of medical information, and perceived levels of being poorly, fairly, or well informed. The doctor, nurse, and Internet were the top three preferred sources of information. A large majority of patients indicated feelings of being well informed, as well as a comparison with their preferred source of information with the overall ratings for quality of care. This manuscript has been formatted according to the requirements for the Journal of Nursing Leadership.

An additional section of discussion and findings follows the manuscripts in Chapter Three, as not all of the analyses could be presented within the confines of the two manuscripts.

Manuscript A:

Patient Ratings of the Quality of Healthcare in Saskatchewan Hospitals

Abstract

Purpose: To examine patient ratings of the overall quality of care received in Saskatchewan hospitals. In addition, patient ratings of quality of care received were examined in relation to their involvement in decision making regarding their medical condition and treatment options.

Method: Patients admitted into hospital with one of four tracer conditions were invited to participate in a paper and pencil survey regarding their hospital stay. Descriptive statistics and comparative analyses were conducted.

Findings: Results indicated a moderately high rating of overall quality of care and a medium correlation between overall quality of care and involvement in decision making in relation to medical care and treatment options.

Implications: The provision of opportunities for patient participation in decisions related to their medical care is important to patients and contributes to overall perceptions of quality of care.

Word Count: 149

Key Words: Quality of care, involvement, patient perceptions, and decision making

Patient Ratings of the Quality of Healthcare in Saskatchewan Hospitals

The provision of quality of care is an expectation of patients, individual professionals and the nursing profession (Lynn, McMillen, & Sidani, 2007). Patients are the recipients of healthcare; therefore their opinions and preferences are essential when evaluating the overall quality of care received in hospitals. There is limited research evaluating the patients' perspective of what constitutes quality of care (Eldh, Ekman, & Ehnfors, 2006). Currently, patients are encouraged to share or take part in the decision making in relation to their medical care and options for treatment. It is not known if the level of participation in decision making influences the perceived level of quality of care. Patient ratings of quality of care received were examined in relation to their involvement in decision making regarding their medical condition and treatment options.

Current Challenges

Our hospitals have faced many challenges in the past decade that have affected how healthcare has been delivered (Spence Laschinger, 2004). Social changes that impact quality of care include our aging population in Canada, increased medical advances leading to increased longevity and co-morbidities, and higher patient expectations (Irurita, 1999). There have been many changes within the Canadian healthcare system that have affected the provision of high quality care. Some of these system changes include early discharge, rising costs in a context of limited resources, a shortage of healthcare staff, and increased use of casual and temporary staff. These changes continually challenge our healthcare system and the provision of high quality healthcare (Irurita & Williams, 2001). Gaining the patient perspective is necessary to evaluate the current level of care that is provided on specific units within the hospitals in light of the challenges to patient care delivery.

Decision Making and Healthcare Staff

Traditionally, doctors were seen as the decision makers (Purbrick, Tu, & Damato, 2006) with patients expected to be silent and compliant. In the past 10 years, this has changed. Patients have been encouraged to be active in their care and in decision making about that care. Research has suggested the majority of patients prefer taking an active role in

decision making or at least being asked their opinion (Purbrick, et al., 2006; Sainio, Lauri & Eriksson, 2001). Encouraging patients to take a more active role in decision making may promote positive health outcomes.

The younger population appears to be more assertive when receiving healthcare and is more apt to seek out medical information. Often younger and highly educated patients utilize the Internet for information (Proude, Shouriw, Conigrave, Wutzke, Ward, and Harber, 2004). Patients who regularly access the Internet for information on their condition and options for care may be more knowledgeable and this may impact their expectations in the level of decision making (Entwistle, Williams, Skea, MacLennan, Bhattacharya, 2006). These patients may be more apt to expect a higher level of information to be provided and to be actively involved in decision making.

Studies within the U.S. have reported that increased involvement in medical care has resulted in increased patient satisfaction, coping, health status, and self management with healthcare (Baker, 2006, Bastianens, Royen, Pavlic, & Raposo, 2007; Eldh, Ekman, & Ehnfors, 2006; Harvey, 1999; Purbrick, Tu, & Damato, 2006). Patients with high levels of satisfaction are more compliant with following their treatment plans (Spence Lashinger, McGillis Hall, & Almost, 2004). Thus it appears that increased involvement in patient care results in better physical outcomes for the patient and implies higher levels of satisfaction.

Healthcare Interactions

Interactions between the healthcare provider and the patient can inhibit or increase patient participation in healthcare and perceived level of satisfaction with quality of care. Research suggests that providing information that is relevant to individual needs, the manner the information is presented, and allowing adequate time for providing and obtaining necessary information to and from the patient are all areas that need to be considered to promote active involvement in decision making (Eldh et al., 2006; Entwistle et al., 2006; Irurita, 1999; Sainio et al., 2001; Schimdt, 2003; Thorsteinsson, 2002). For example, the amount of information provided to patients can vary due to limited interactions with the patient.

Nursing shortages and early discharges can greatly affect the amount of time spent with a patient. This may result in limited knowledge transfer and decrease the patient's desire to participate in decision making within his or her own medical care (Irurita & Williams, 2001). Consideration of these areas will ensure that the patient feels listened to, is able to understand the information that has been presented, and allows the patient to reciprocate with information on current issues. With increased interaction time, the healthcare provider is able to determine the level of knowledge and deficits, ensure information provided is understood, and promote individualized care. If patients indicate professional staff have listened to them, are respectful, see them as individual patients, and tailor their care based on this, they may view the provision of care positively. This can enhance views of perceived quality of care and enhance patient participation in care.

Patient Perspectives

Spence Laschinger, McGillis Hall, & Almost (2004) noted that many questionnaires only measure aspects that healthcare providers feel are important when evaluating patient perceptions of quality of care. Healthcare providers have limited insight into how patients view the provision and acceptance of health information or healthcare that is provided (Durieux, Bissery, Dubois, Gasquet, & Coste, 2008). Patients are the consumers utilizing the healthcare system; therefore, their insight would be beneficial in examining and evaluating healthcare services.

Patients need to have accurate information provided to them to feel knowledgeable about their condition, treatment and care. Accurate information will increase their involvement in decision making and each patient will be able to make sound and valid decisions regarding their care. Research studies have suggested that patients view receiving inadequate amount of information as difficult, and this affects the patient's perceived level of satisfaction (Sainio, Lauri, Eriksson, 2001). Providing information that is relevant and meets patient expectations may influence overall perceived levels of satisfaction and willingness to be involved in decision making regarding care.

Informed and Decision Making

The patient's level of knowledge may impact their willingness to partake in decision making and improve overall satisfaction with the quality of care received. Sainio, Lauri & Eriksson (2001) found that "patient access to adequate and comprehensible information was considered to an important precondition for participation" (p. 102). Patients who receive and participate in opportunities to be involved in decision making regarding their medical condition may increase their overall satisfaction with care (Harvey, 1999).

The willingness and level of involvement in decision making may differ with each patient, and may be influenced by their differing perspectives. Some patients may not want to take responsibility and make decisions about their healthcare. They may feel it not up to them and it is the responsibility of the healthcare professional. Others may want to ensure their opinions and suggestions are being considered (Bastianens, Royen, Pavlic, Raposo, & Baker, 2007).

Healthcare professionals may influence the patient's involvement in decision making of their healthcare. Healthcare professionals who do not feel satisfied in their workplace may not feel the need to involve patients in decision making. Organizational culture and staff satisfaction may be factors that indirectly contribute to the willingness of health professionals to encourage patients to participate in decision making (Tzeng, Ketefian, & Redman, 2002). Therefore, workplaces that support a positive environment and report higher levels of staff satisfaction may result in higher levels of patient involvement in medical decision making.

Evaluation of Perspectives

Evaluation of patient perspectives of care serves many purposes as it provides a greater understanding of the patients' perspective, assists in identifying areas of improvement, and provides a means of evaluating outcomes of care (Pettersen, Veenstra, Guldvog, & Kiolstad, 2004). In addition, evaluation of patient perspectives enables increased patient involvement and demonstrates interest in patients' opinions. Including the patients' perspectives may result in better health outcomes, as patients who report feelings of satisfaction with care are more likely to follow treatment of care (Spence Laschinger, et al., 2004). In addition, gaining the patient's perspective enables increased patient

involvement which may increase their awareness about the importance of quality of care, therefore enhancing the patient's commitment to maintaining their health (Lamb, Mowinski-Jennings, Mitchell, & Lang, 2004).

Quality of Care

The provision of high quality healthcare is an expectation of patients and is a professional requirement for the healthcare staff (Lynn, McMillian, & Sidani, 2007). Due to the different roles of the healthcare provider and the patient, it is important to note that there may be considerable differences in the two perspectives (Ramsay, Campbell, Schroter, Green, & Roland, 2000). Both perspectives are important when evaluating the provision of quality health care.

Method

In the larger study titled "Convergence or Divergence in Perspectives on Quality", adult patients hospitalized in an acute care facility with inclusion criteria of one of four tracer conditions (myocardial infarction, prostate disease, hysterectomy, and cerebral vascular accident) were eligible to participate. The tracer conditions were selected as the tracers are part of an index of quality developed by Lockhart (2007) based on the Canadian Institute for Health Information performance indicators (CIHI, 2010). The indicators were developed in a framework to measure national health outcomes, and quality of care (CIHI, 2006). Establishing clearly defined indicators assists in measuring and evaluating the delivery of healthcare in Canada (Lockhart, 2007), which is needed to develop effective strategies to improve the quality of healthcare.

Study Sample

Patient data were collected from January to May 2009. Information about the voluntary survey was posted on the nursing units. Healthcare staff notified the research team group if there were patients on the unit who met the inclusion criteria and were interested in participating in the study. A member from the study group met with each patient, reviewed the intent of the study and gained consent. This was a voluntary study employing pen-and-paper questionnaires. Most surveys were completed independently by the participants. However, five surveys were completed by the patient and the caregiver. The study sample consisted of 378 patients, resulting in a 95% response rate of those patients approached.

Measures

Several surveys were developed for the larger study to evaluate perceptions of healthcare staff, family and patients at three major hospitals in an urban city in Saskatchewan study and were conducted by the MERCURi Research Group. The Patients' Perspectives on Managing Quality of Care survey was utilized to examine patient perceptions and resulted in Cronbach's $\alpha = .93$ for the scale A reliability coefficient of .70 or higher is considered acceptable, thus indicating strong confidence in the results (Fields, 2009). The patient survey was developed using the scales of Lepnurm, Dobson & Backman (2003), and expertise of the staff at the MERCURi Research Group. Several questions were developed and incorporated in the patient survey for the purpose of this study.

The patients were instructed to select the choice that best represented their feelings and thoughts on that topic. To measure how involved patients were in decision making of their medical care, patients were asked to rate their involvement in decision making using a six point scale: Doctor does not listen and decides = 1, after listening doctor decides = 2, I offer my views then doctor decides = 3, we discuss my views then doctor decides = 4, we discuss situation and both decide = 5, and we discuss situation and I decide = 6. In addition, patients were asked to provide a global rating of the overall quality of care provided to them by nurses and doctors on the hospital unit using the following scale; Don't know, 0, 10, 20, 30, 40, 50, 60, 70, 80, 90, 100 (0 being non-functional, 10 to 40 = terrible to poor, 50 to 60 = passable or adequate, 70 to 90 = good to excellent, 100 = perfect).

The scales utilized for each of the questions provide a means to gain patient perceptions in each of the specific areas. Patients were provided with six choices to indicate their involvement in decision making of their medical care and treatment options with their Medical Doctor. Since there is varying degrees of patient involvement, several choices were available to ensure the patient was able to accurately indicate their involvement in decision making in relation to their medical care. In addition, patients were asked to indicate their perception of the overall quality of care received on the

hospital unit using a scale of 0 to 100. A large range scale was utilized to ensure accurate ratings were obtained which provided more sensitivity to the ratings.

Ethical Considerations

The larger study: "Convergence or Divergence in Perspectives on Quality" received approval from the University of Saskatchewan. Operational approval from the Saskatoon Health Region was granted, which included approval from each of the nursing unit managers where the patients were surveyed. A research officer was hired through the Saskatoon Health Region to oversee the data collection, ensure compliance with confidentiality, and Health Insurance Portability Information Act (HIPA, 2006). The research assistants reviewed the intents of the study with each patient and obtained written consent for use of the information.

Hypotheses

Patients who indicate ratings of "we discuss my views then doctor decides", "we discuss situation and both decide", and "we discuss situation and I decide" will have higher ratings of overall satisfaction of quality of care and a Pearson's correlation greater than .50 is expected.

Analysis

Descriptive statistics for the age of the patients, ratings of overall quality, and decision making regarding their medical care were completed using PASW Statistics 17 for Windows. Comparative analyses were conducted using Pearson's Product Moment Correlation. Pearson's Correlation measures the strength or covariance of the linear relationship between two variables (Kinnear, & Gray, 2010). The Pearson product moment correlation coefficient (r) is a mathematical index of the relationship between two variables. Kinnear and Gray (2010) describe, "The value of r can vary within the range of -1 to 1 inclusive" (p.397). A value of the coefficient r >.1 is considered trivial, .1 to .3 is considered a small effect, .3 to .5 is considered a medium effect, .5 and greater is considered a large effect. A result of 0 indicates no relationship between the variables. A negative value indicates a negative relationship and a positive value indicates a positive relationship (Field, 2009). In addition, cross tabulation was utilized to" inspect a bivariate

distribution in order to ascertain the presence of an association between the variables concerned" (Kinnear & Gray, p. 414, 2010). This allowed for further exploration to determine where the characteristics of one variable and the characteristics of another variable occur together.

Results

To determine how patients perceived their health status prior to hospitalization patients were asked to rate their health status six months before being treated in the hospital; a high majority indicated "about the same as most people your age" (42%) and "better than most people your age" (39%) (Table 1). Patients admitted into acute care units with the tracer condition myocardial infarction accounted for 35 % of the sample, hysterectomy accounted for 28%, stroke accounted for 20%, and lastly prostate disease accounted for 18% of the sample (Table 2). Patients diagnosed with myocardial infarction, or hysterectomy accounted for 63% of the sample.

The patients indicated the average rating of quality of care using a scale from 0 to 100, 0 indicates quality of care received was non-functional, 10 to 40 indicates care was terrible to poor, 50 to 60 indicates care was passable or adequate, 70 to 90 indicates care was good to excellent, and a rating of 100 indicates quality of care was perfect. The overall average of quality of care was 78.98, the good to excellent range. Of the total number of respondents, 90% rated the overall quality of care between 70 and 100 (Table 3). The number of patients admitted with the tracer condition prostate disease compared with overall quality of care ratings that fell in a range between 75 and 100 were 84% (n = 56). Results for hysterectomy patients were 87% (n = 91), results for myocardial infarction patients were 77% (n = 102) and results for stroke patients were 64% (n = 56) who indicated ratings of overall quality of care between 75 and 100.

A comparative analysis of the patient's medical condition, age or gender, with ratings of overall quality of care resulted in small to insignificant correlations (Table 4). Respondents who indicated "we discuss the situation and both decide" when asked about decision making regarding their medical care and treatment options was 34% (Figure 1). This was the highest ranked category for this question. Over half (61%) of the patients who indicated "we discuss the situation and both decide" resulted in ratings of overall quality of care within the range of 80 to 90. In addition, less than

1% of patients who indicated "we discuss the situation and I decide" resulted in ratings of overall quality of care within the range of 0 to 70. Therefore, patients who reported increased decision making regarding their care indicated overall ratings of quality of care to be good, excellent or perfect (Figure 2).

An analysis was completed with ratings of overall quality of care and groupings of age. There were no strong findings associated with the ratings of overall quality of care with age groupings (Table 5). A comparative analysis of the overall quality of care, and involvement in decision making regarding medical care resulted in a correlation of r = .308, p = < .001 (1 tailed). The results are lower than expected and hypothesized.

Discussion

The overall patient ratings of the quality of healthcare received in Saskatoon hospitals were moderately high (78.9%), indicating feelings of receiving good to excellent quality of care. Healthcare in Canada faces many challenges due to limited availability of certain healthcare professionals, resulting in decreased staffing levels and increased workloads. There are earlier discharges, and more chronic illnesses are being managed at home (Irurita, & Williams, 2001). Despite the challenges, results indicated moderately high ratings of the overall quality of care.

A large majority (81%) of patients indicated their health status was the same or better than most people their age prior to admission to the hospital. When evaluating patient perceptions of healthcare, it is important to include a method to measure the patient's physical health status. Patients with better physical health are more apt to report higher levels of satisfaction (Chang et al., 2006). Evaluating patients who have similar health outcomes will provide more meaningful and reliable ratings of quality of care.

Patients admitted with the tracer conditions prostate disease and hysterectomy had higher ratings of overall quality of care. This may be attributed to lower morbidity rates with those conditions. Patient ratings of overall quality of care may be affected by the severity of the condition (Barlesi, Boyer, Doddoli, Antoniotti, Thomas, & Auquier, 2005).

Examining patient perceptions of care received assists in providing a more comprehensive evaluation of Canadian healthcare services. However, patient ratings of the overall quality of care can be correlated with many factors. For example, patients may view having limited information provided on their condition as poor care. Decreased knowledge levels may impede their willingness to participate in decision making (Sainio et al. 2001). Decreased time with their healthcare provider may decrease satisfaction with care (Kralik, Koch, & Wotton, 1997), and may also compel patients to seek information from less reliable sources. These are important elements to consider when evaluating the quality of healthcare.

Involvement in Decision Making

A high significance was noted, indicating that the patients who are more involved in decision making are more likely to report a higher level of quality of care. Patients who were able to make the decisions about their medical care after discussing the situation with the doctor resulted in 88% of the ratings of quality of care falling in the range of 75 to 100. It was also noted that this area had the most ratings of 100 for quality of care.

Involvement in decision making may not be a preferred choice for all Canadians. Nearly a third (30%) of patients reported "doctor listens briefly and decides" or "I offer my views, doctor listens and then decides". Less than 10% of patients indicated the "doctor does not listen but decides". Considering theses ratings combined with the high overall ratings of quality of care it is clear that some patients are content with the doctor listening to their views but making the final decision of their medical care and options for treatment. Less than 40% of patients indicated "we discuss situation and both decide" and less than 20% of patients indicated "we discuss situation and I decide". It is interesting to note that only a small number of patients indicated sole decision making after discussing the situation with the doctor. These ratings may have been influenced by the average age of the respondents being (M = 63 years). Older patients may be more likely to prefer the decision making to be left to the doctor or having the doctor involved in the decision making. A review of the literature indicated the younger generation and highly educated individuals tend to want to be more involved in decision making of their medical care (Proude et al., 2004).

Involving and encouraging patients to become more involved in decision making presents many challenges to healthcare professionals. More time is needed with patients to ensure they are able to provide their views, for information to be presented on all options, and ensure the information that is provided meets the needs of that individual patient. With decreased staffing and increased workloads in our hospitals, time is often in short supply. However, patients who feel more knowledgeable about their condition are more apt to take an active role in decision making about their medical care and options for treatment. In addition these patients are more apt to report higher ratings of overall quality of care. More consideration is required to ensure we are meeting the educational needs of our patients. Ongoing evaluation of patient perception on care they receive needs to be conducted and monitored to ensure the continued provision of quality of care in Canadian hospitals.

Nursing Implications

Allowing patients to become more involved in decision making has been associated with higher ratings of quality of care and considered an important aspect of patient care. Healthcare providers, including nurses need to advocate for and ensure adequate time is provided to promote patient participation in their healthcare. Continued research and further evaluation is needed to ensure healthcare professionals continue to provide opportunities for patient involvement in decision making of care.

Limitations of the Study

One limitation was the smaller variation in age of the participants. There were not sufficient numbers to stratify by age and condition. The questionnaire evaluated the patient's perception of the overall quality of care provided by all healthcare staff in the hospital. It may have been beneficial to further examine the patient's perception of quality of care stratified by profession.

Individual ratings varied from 30 to 100. This indicates a need for further exploration. Evaluating lower ratings would provide valuable information needed to address areas requiring improvement and evaluating higher ratings would provide information on areas where expectations are being surpassed, thus ensuring the provision of quality of care is

maintained and improved. The current study evaluated the overall rating of care and did not evaluate the reasoning for the ratings that were indicated.

In addition, it would be beneficial to evaluate reported level of involvement in decision making by profession.

Despite challenges that the nursing profession faces, are nurses able to involve the patients in their care and options for treatment? Is the therapeutic relationship being established to ensure the patient feels comfortable and knowledgeable to discuss these options? These are questions that further research would be able to evaluate.

There is limited Canadian research in the area of quality of care. Some studies have been completed in the U.S.; however, generalizing from U. S. research, based on a different system for healthcare, might not be comparable.

Increased Canadian research will provide more information, allowing a macro view of patient care within our health care system. Finally, research will aid healthcare sectors to implement strategies that result in quality improvement and increase the effective utilization of fiscal resources.

Conclusion

Overall, patients reported moderately high ratings of quality of care received in Saskatoon hospitals. Ratings of the overall quality of care are influenced by the perceived level of involvement in decision of making of the patients' medical condition. Patients are more likely to report higher levels of satisfaction – and therefore perceive higher quality of care - if they are involved in decision making regarding their care and options for treatment. Health professionals can use this research to advocate for sufficient time to increase interaction with patients to ensure they are participating in decision making to their level of satisfaction.

References

- Baker, G. R., (2006). Strengthening the contribution of quality improvement research to evidence based healthcare. *Quality Safe Healthcare*, 15, 150-151.
- Barlesi, F., Boyer, L., Doddoli, C., Antoniotti, S., Thomas, P., & Auquier, P. (2005). The place of patient satisfaction in quality assessment of lung cancer thoracic surgery. *Chest Journal*, *128*(5), 3475-3481.
- Bastiaens, H., Royen, P. V., Pavlic, D. R., Raposo, V., & Baker, R. (2007). Older people's preferences for involvement in their own care: A qualititative study in primary healthcare in 11 European countries. *Patient Education and Counseling*, 68, 33-42.
- Canadian Instutite for Health Information. (2006). Comparable health and health system performance indicators for Canada, the provinces and territories. Retreived from http://secure.cihi.ca/cihiweb/dispPage.jsp?cw_page=home_e
- Canadian Instutite for Health Information. (2010). *Health indicators*. Retreived from http://secure.cihi.ca/cihiweb/dispPage.jsp?cw page=indicators e
- Chang, J. T., Hays, R. D., Shekelle, P. G., MacLean, C. H., Solomon, D. H., Reuben, D. B., Roth, C. P., Kamberg, C. J., Adams, J., Young, R. T., & Wenger, N. S. (2006). Patients' ratings of their healthcare are not associated with the technical quality of their care. *Annals of Internal Medicine*, 144(9), 665-672.
- Durieux, P., Bissery, A., Dubois, S., Gasquet, I., & Coste, J. (2008). Comparison of healthcare professionals' self assessments of standards of care and patients' opinions on the care they received in hospital: Observational study. Retrieved from http://gshc.bmj.com
- Eldh, A. C., Ekman, I., & Ehnfors, M. (2006). Conditions for patient participation and non-participation in healthcare, *Nursing Ethics*, 13(5), 503-514.

- Entwistle, V., Williams, B., Skea, Z., MacLennan, G., & Bhattacharya, S. (2006). Which surgical decisions should patients participate in and how? Reflections on women's recollections of discussions about variants of hysterectomy. *Social Science & Medicine*, 62, 499-509.
- Field, A. (2009), Discovering statistics using SPSS. (3rd ed.). London, England: SAGE Publications Ltd.
- Health Insurance Portability Information Act. (2006). Retreived from http://guideproductions.com/services/web/hipaa/
- Irurita, V. F. (1999). Factors affecting the quality of nursing care: the patient's perspective. *International Journal of Nursing Practice*, *5*, 86-94.
- Irurita, V. F., & Williams, A. M. (2001). Balancing and compromising: nurses and patients preserving integrity of self and each other. *International Journal of Nursing Studies*, 38, 579-589.
- Kinnear, P.R, & Gray, C.D. (2010). PASW statistics 17 made simple. NY, United States: Psychology Press.
- Kralik, D., Koch, T., & Wotton. (1997). Engagement and detachment: Understanding patients' experiences with nursing. *Journal of Advanced Nursing*, 26, 399-407.
- Lamb, G. S., Mowinski-Jennings, B., Mitchell, P. H., & Lang, N. M. (2004). Quality agenda: priorities for action recommendations of the American Academy of Nursing Conference on healthcare quality. *Nursing Outlook*, 52(1), 60-65.
- Lepnurm, R., Dobson, R. T., & Backman, A. M. B. (2003). If the pillars are shaky, does faith in medicare crumble? Healthcare Management Form, 16(1) 11-16.
- Lockhart, W. (2007). The views of physicians on health care quality. (Doctoral dissertation). Retrieved from http://library2.usask.ca/theses/available/etd-04022007-110353/unrestricted/lockhart.pdf
- Lynn, M. R., McMillian, B. J., & Sidani, S. (2007). Understanding and measuring patients' assessment of the quality of nursing care. *Nursing Research, May/June, 56*(3), 159-165.
- Pettersen, K. I., Veenstra, M., Guldvog, B., & Kiolstad, A. (2004). The patient experiences questionnaire; Development, validity and reliability. *International Journal in Healthcare*, 16(6), 453-463.

- Proude, E. M., Shouriw, S., Conigrave, K. M., Wutzke, S. E., Ward, J. E., & Harber, P. S. (2004). Do elective surgery patients use the Internet to look for information about their condition? *ANZ J.Surg*, *74*, 304-307.
- Purbrick, R. M. J., Tu, K. L., & Demato, B. E. (2006). The patient's role in the decision-making process-a perspective from the liverpool ocular oncology centre. *Eve*, 1034-1039.
- Ramsay, J., Campbell, J. L., Schroter, S., Green, J., & Roland, M. (2000). The General Practice Assessment Survey: tests of data quality and measurement properties. *Family Practice*, 17(5), 372-379.
- Sainio, C., Lauri, S., & Eriksson, E. (2001). Cancer Patients' views and experiences of participation in care and decision making. *Nursing Ethics*, 8(2), 97-113.
- Schimdt, L. A. (2003). Patients perceptions of nursing care in the hospital setting. *Journal of Advanced Nursing*, 44(4), 393-399.
- Spence Laschinger, H., McGillis Hall, & Almost, J. (2004). A psychometric analysis of the patient satisfaction with nursing care quality questionnaire; an actionable approach to measuring patient satisfaction. *Journal of Nursing Care Quality*, 20(3), 320-230.
- Thorsteinsson, L. (2002). The quality of nursing care as percieived by individuals with chronic illnesses: the magical touch of nursing. *Journal of Clinical Nursing.*, 11, 32-40.
- Tzeng, H., Ketefian, S., & Redman, R. W. (2002). Relationship of nurses' assessment of organizational culture, job satisfaction, and patient satisfaction with nursing care. *International Journal of Nursing Studies*, *39*, 79-84.

Table 1 Health Status and Age

		or so, before b	How was your health, six months or so, before being treated in the hospital?		
			About		
			the	Better	
			same	than	
			as most	most	
		Worse than	people	people	
		most people	your	your	
		your age	age	age	Total
Age range	19 - 29	3	3	0	6
	30 - 39	5	7	3	15
	40 - 49	23	33	16	72
	50 - 59	10	37	14	61
	60 - 69	10	26	34	70
	70 - 79	14	38	42	94
	80 - 89	5	13	34	52
	90 - 99	1	3	4	8
Total		71	160	147	378

Table 2 Medical Condition

What is the medical condition you are being treated for?			
Condition	Frequency	Percent	
Myocardial Infarction			
	132	34.9	
Cerebral Vascular Disease	74	19.6	
Prostate Disease	67	17.7	
Hysterectomy	105	27.8	

Table 3 Ratings of Overall Quality of Care

Rating	Frequency	Percent
0	0	0
10	0	0
20	0	0
30	3	.8
40	3	.8
45	1	.3
50	4	1.1
55	4	1.1
60	7	1.9
65	17	4.5
70	43	11.4
75	67	17.7
80	101	26.7
85	40	10.6
90	54	14.3
95	24	6.3
100	10	2.6
Total	378	100.0

Table 4 Sex, Age, and Medical Condition Correlation

Variables	Overall Quality of Care
Sex	0.035
Age	-0.150**
Medical Condition	.132*
**p< 0.01 *p < 0.05	
*p < 0.05	

Table 5 Ratings of Quality of Care with Age Groupings

		Average Rating of Quality of
Age	Frequency	Care
19-29	6	70
30-39	15	81
40-49	72	81.11
50-59	61	79.92
60-69	70	81.79
70-79	94	77.82
80-89	52	76.15
90-99	8	63.13
Total	378	78.98

Figure 1 Decision Making

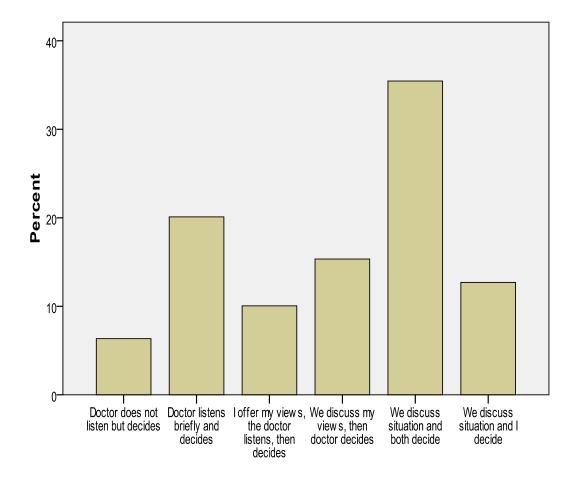
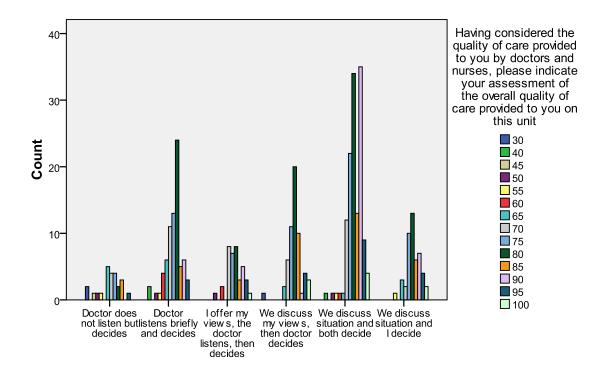


Figure 2 Decision Making and Ratings of Overall Quality of Care



Manuscript B:

The Human Touch is Still Preferred

Abstract

Due to advances in technology, patients seeking information about their medical condition are able to access

numerous sources. There is limited Canadian research that explores what source of information patients prefer to

access when they require such information. It is not known whether different sources of information impact patients'

views of quality of care, whether they feel well informed or poorly informed. As a sub analysis of a larger study titled

"Convergence or Divergence in Perspectives on Quality", patients hospitalized with one of four tracer conditions were

surveyed about their involvement in and satisfaction with the provision of healthcare. The objectives of this study

were to determine the patients' preferred source of information regarding their medical condition and options for

treatment, and to examine whether the patients' preferred source of information impacted their feelings of being well

or poorly informed and their overall ratings of quality of care. Results indicated a moderately high overall rating of

quality of care. The majority of patients preferred their doctor or nurse to provide information about their medical

condition, and a sizable amount of patients indicated ratings of feeling fairly or highly informed about their medical

condition.

Key words: Quality of care, patient perceptions, Internet, informed, and source of information

Word count: 206

44

Patient Perceptions of Healthcare in Saskatchewan

Patients seeking information about their medical condition are able to access numerous sources.

Traditionally, information was sought from healthcare professionals. Due to advances in technology other sources, such as the Internet are now easily accessible. There is limited Canadian research on what source of information patients prefer to access when they require information about their medical condition, and how it impacts feelings of being well informed. Patient ratings of overall quality of care received in Saskatchewan hospitals were examined in relation to their preferred source of information about their medical condition, and feelings of being well, fairly or poorly informed.

Sources of information

In the past, patients relied largely on healthcare professionals to provide information about their medical conditions. Due to advances in technology, patients are able to obtain medical information from a variety of sources. Earlier discharges from hospitals, longer life expectancies, and higher number of individuals living with chronic illnesses increase the need for accessible and accurate information to facilitate self care at home (Cowan & Hoskins, 2007).

Traditionally, healthcare professionals provided brochures and recommended books to provide patients with additional knowledge regarding their medical conditions. Family, friends, television, and magazines are other sources that patients have utilized to obtain information (Cowan & Hoskins, 2007; Hubbard McCree, Sharpe, Brandt, & Robertson, 2007). However, with advances in technology these sources may not be utilized as much as they have been in the past. Support groups and volunteers are two sources of information that were not discussed in the identified studies. Therefore, the number of patients who utilize these sources for information is relatively unknown and it is not known what impact these sources of information have on patient's feelings of being informed and overall ratings of quality of care.

Internet

More recently, the Internet has become widely accessible and offers a wealth of information to patients. One recent study found that, "52 million American adults relied on the Internet in 2000 to make health decisions" (Proude, et al., 2004, p.304). This trend continues to increase as computers become more common in our homes (Purbrick, Tu, & Damato, 2006). Patients who use the Internet for health information has been reported to be more common in English speaking countries (Boer, Versteegen & Van Wijhe 2007). This trend continues to increase as computers become more common in our homes (Purbrick, et al., 2006). Statistics Canada (2010) found that in 2009, 77% of individuals had access to the Internet in their homes. Despite the growing numbers of patients who utilize the Internet as a source for medical information, a U. S. study found many patients still prefer the healthcare provider to be the main and most trusted source of information (Cowan & Hoskins, 2007; Hubbard, et al., 2007).

The younger population appears to be more assertive when receiving healthcare and are more apt to seek out information regarding their medical condition. Often younger and highly educated patients use the Internet for information (Proude, et al. 2004). All women tend to be more apt to search for health related information on Internet (Statistics Canada, 2004).

Statistics Canada (2008) reported that the type of health information sought on the Internet varied with the age of the individual. Younger individuals more typically looked for health information involving maintenance of a healthy lifestyle, including such areas as diet, exercise, and nutrition. Older individuals tended to search for health information on specific health conditions or diseases and medications (Statistics Canada, 2008). This is significant, as multiple age groups are utilizing the Internet as a source for health related information.

Patients who regularly access the Internet for information on their condition and options for care may be more knowledgeable and this may impact their participation in the level of decision making (Entwistle, Williams, Skea, MacLennan & Bhattacharya, 2006). These patients may be more apt to expect a higher level of information to be provided and to be actively involved in healthcare decision making. There are many sources of information available on the Internet, some of which are more credible than others (Cowan & Hoskins, 2007; Boer, Versteegen, & Van

Wijhe, 2007). Patients may not be able to decipher the quality of information presented. Statistics Canada (2008) noted that only 38% of individuals reported that they discussed health information that was retrieved from the Internet with their doctor or healthcare provider.

Each patient may have different information needs. Some may want more information about their medical condition than others. The patient's personality may influence the amount of information that is being sought; it may be beneficial to some patients and harmful to others. The information presented may impact on the patient's coping mechanisms, either negatively or positively (Cowan & Hoskins, 2007).

Issues When Evaluating HealthCare

The Canadian healthcare system is unique when compared to other countries, yet the majority of research has occurred in countries outside of Canada, thus transferability of the results is questionable. Canadian patients may view quality of care differently than those in other areas. It is essential to complete research within our healthcare system to fully evaluate and provide effective results.

Much of the previous research has utilized methods that evaluated the healthcare provider's view of quality of care (Spence Laschinger, McGillis Hall, & Almost, 2004). It is important to note that what constitutes high quality of care from a patient's perspective can differ from a healthcare provider's perception (Lee, & Yom 2006; Mathiesen et.al., 2007; Sch.Thorsteinsson, 2002;). The differing perspectives can be attributed to whether one is receiving care or providing care. However, further research is required to fully determine the extent of the differences and the effect on quality of care.

In the past decade, there has been an increased awareness in promoting quality care. However, there is limited Canadian research on the patient's perceptions of care. Lamb, Mowinski-Jennings, Mitchell, and Lang, (2004) state, "Consumers have not been adequately involved in the quality movement" and "strategies are needed to encourage national debate on quality of healthcare from the patient's perspective" (p. 62). Involving the patient and evaluating the patient's perceptions of care may assist in promoting and maintaining the provision of high quality care in Canadian hospitals.

What one patient defines as satisfactory may be something completely different to another patient. Culture, age, gender, and life experiences are factors that may influence a patient's view of what constitutes as a satisfactory experience (Barlesi, Boyer, Doddoli, Thomas, & Auquier, 2005). A patient may determine what aspects are important in quality of healthcare based on individual experiences, which may not reflect the general population's view of quality of care (Wensing & Elwyn, 2003). In addition, these same factors may influence whether the patient actively seeks out information on their medical condition.

When asking patients to evaluate the overall quality of care some patients may identify technical aspects of care as being the most important, others may view interpersonal communication as the most important aspect required, and still others may look at all areas as being crucial in the provision of quality of care. Some research suggests that these areas should be evaluated independently of each other and overall quality ratings should not be used (Chang et al., 2006). Other studies have suggested that satisfaction questionnaires should include a method to measure the patient's physical health status. Patients with better physical health are more apt to report higher levels of satisfaction (Chang et al., 2006). Evaluating patients who have similar health outcomes will provide more meaningful and reliable ratings of quality of care.

Method

Study Sample and Procedure

In the larger study titled "Convergence or Divergence in Perspectives on Quality", adult patients hospitalized in an acute care facility with inclusion criteria of one of four tracer conditions (myocardial infarction, prostate disease, hysterectomy, and cerebral vascular accident) were eligible to participate. The tracer conditions were selected as the tracers are part of an index of quality developed by Lockhart (2007) based on the Canadian Institute for Health Information performance indicators (CIHI, 2010). The indicators were developed in a framework to measure national health outcomes, and quality of care (CIHI, 2006). Establishing clearly defined indicators assists in measuring and evaluating the delivery of healthcare in Canada (Lockhart, 2007), which is needed to develop effective strategies to improve the quality of healthcare.

Patient data were collected from January to May 2009. A research officer was hired through the Saskatoon Health Region to oversee the data collection, ensure compliance with confidentiality, and Health Insurance Portability Information Act (HIPPA, 2006) agreement. Information about the voluntary survey was posted on the nursing units. Healthcare staff notified the research team group if there were patients on the unit who met the inclusion criteria and were interested in participating in the study. A member from the research group met with the patient to review the intent of the study and obtain consent if the patient was willing.

This was a voluntary study employing pen-and-paper questionnaires. The majority of patients completed the study independently, the research assistant offered assistance if required. Five surveys were completed by the patient and the caregiver. The study sample consisted of 378 patients, resulting in a 95% response rate of those patients approached.

Measures

The Patients' Perspectives on Managing Quality of Care survey was utilized to examine patient perceptions and resulted in Cronbach's α = .93. A reliability coefficient of .70 or higher is considered acceptable, thus indicating strong confidence in the results (Fields, 2009). The patient survey was developed using the scales of Lepnurm, Dobson & Backman (2003), additional literature, and expertise of the staff at the MERCURi Research Group. Several questions were developed and incorporated in the patient survey for the purpose of this study.

To measure how informed patients feel about their medical condition and the treatments available, they were asked to rate the response that best supported their feelings using a five point scale (Very poorly = 1, poorly = 2, fairly = 3, highly = 4, and very highly = 5). Patients were asked to select one or more sources they found useful for obtaining information about the medical condition they have. They were asked to choose from formal sources (doctor, nurse, hospital, health unit), family sources (family, relatives, friends), and media sources (Internet, TV, magazines, or pamphlets). Patients were able to choose more than one option. In addition, patients were asked to provide a global rating of the overall quality of care provided to them by nurses and doctors on the hospital unit using the following scale:

Don't know, 0, 10, 20, 30, 40, 50, 60, 70, 80, 90, 100 (0 being the non-functional, 10 to 40 = terrible to poor, 50 to 60 = passable or adequate, 70 to 90 = good to excellent, 100 = perfect).

The scales utilized for each of the questions provide a means to gain patient perceptions in each of the specific areas. A five point Likert scale was utilized to capture the patients' view on how informed they are about their medical care and options for treatment. The choices ranged from very poorly, to very highly. Due to the multitude of sources of information, eleven options were available for patients to indicate their preferred source or sources of information. Since patients may access more than one source for information on their health condition, they were able to indicate more than one source of preferred information on the survey. In addition, patients were asked to indicate their perception of the overall quality of care received on the hospital unit using a scale of 0 to 100. A large range scale was utilized to ensure accurate ratings were obtained which provided more sensitivity to the ratings.

Ethical Considerations

The larger study titled "Convergence or Divergence in Perspectives on Quality", received approval from the Saskatoon Health Region and the University of Saskatchewan. Operational approval from the Saskatoon Health Region was granted, which included approval from each of the nursing unit managers where patients were surveyed. The research assistant met with each identified patient to review the intent of the study and obtain consent to participate.

Hypotheses

Patients indicating they obtain information about their medical condition from their nurse or doctor will also indicate higher levels of overall satisfaction with quality of care. Patients indicating ratings of retrieving information from family, friends, relatives, Internet, television, magazines or pamphlets will indicate low levels of overall satisfaction with quality of care (ratings between 0 and 30).

Analysis

Descriptive statistics for the age of the patients, ratings of overall quality, and decision making regarding their medical care were completed using PASW Statistics 17 for Windows. Comparative analyses were conducted using

Pearson's Correlation. Pearson's Product Moment Correlation measures the strength or covariance of the linear relationship between two variables (Kinnear, & Gray, 2010). The Pearson product moment correlation coefficient (r) is a mathematical index of the relationship between two variables. Kinnear and Gray (2010) describe, "The value of r can vary within the range of -1 to 1 inclusive" (p. 397). A value of the coefficient r > 1 is considered trivial, .1 to .3 is considered a small effect, .3 to .5 is considered a medium effect, .5 and greater is considered a large effect. A result of 0 indicates no relationship between the variables. A negative value indicates a negative relationship and a positive value indicates a positive relationship (Field, 2009). In addition, cross tabulation was utilized to" inspect a bivariate distribution in order to ascertain the presence of an association between the variables concerned" (Kinnear & Gray, p. 414, 2010). This allowed for further exploration to determine where the characteristics of one variable and the characteristics of another variable occur together.

Results

A slightly higher number of males (53.7%) than females (46.3%) respondents completed the survey (Table 1). The average age of respondents was 63 years of age, with a range from 25 to 96 years of age and 41% of the respondents were under the age of 60 years of age. Patients admitted into acute care units with the tracer condition myocardial infarction accounted for 35 % of the sample, hysterectomy accounted for 28%, stroke accounted for 20%, and lastly prostate disease accounted for 18% of the sample (Table 2). The average rating of quality of care received while in hospital was (M = 78.98), indicating good to excellent quality of care. The ratings ranged from 30 to 100. The number of respondents whose rating fell between 75 and 95 on the rating scale was 75%.

A small number of patients indicated feelings of being poorly informed (7%), and 58% indicated feelings of being well informed (Figure 1). Using a scale of 0 to 100, 73% of patients who indicated feelings of being well informed rated the overall quality of care in the 80 to 100 range. A moderate correlation of r = .36, $p = \le .001$ (1 tailed) was found between the overall rating of quality of care and overall feelings of being poorly, fairly, or well informed (Table 3).

The majority of patients indicated their doctor (81%) was the preferred source of information (Table 3). This preference was followed by the nurse (26%), Internet (18%), family members (17%), friends (14%), and pamphlets (14%). TV, magazines, hospital, relatives and health unit received ratings of 10% or less for preferred source of information. Approximately 41% of patients identified one preferred source of information, 30% indicated using two sources, and 14% utilized three are more sources of information. Less than 5% designated more than three preferred sources of information.

A large majority of patients (77%) who indicated their preferred source of information was their doctor and nurse rated the overall quality of care good or fair. The correlation with the overall quality and preferred source of information being the physician and nurse was insignificant and smaller than predicted. Correlations between overall quality of care and preferred sources of information resulted in correlations smaller than hypothesized (Table 4). Patients indicating ratings of retrieving information from family sources (family, relatives, and friends) and media sources (Internet, television, magazines and pamphlets) correlated with overall ratings of quality of care resulted in insignificant correlations (Table 5). However, patients indicating ratings of retrieving information from formal sources (MD, RN, hospital and health unit) correlated with ratings of overall quality of care resulted in r = .238, $p \le .005$ (2 tailed).

Discussion

The provision of quality of care in Canadian Hospitals is an expectation of patients and as well as a personal and professional requirement of healthcare staff (Lynn, McMillen, & Sidani, 2007). There is limited Canadian research on what patients consider important when seeking information about their medical condition. The patient is the best source for determining whether the information that is being provided is sufficient or whether more information is required. Open communication between the healthcare provider and the patient needs to be established to determine the education needs of the patient.

In this study results indicated doctors continue to be the highest ranked source of information, and nurses the second most preferred source. These results are congruent with other researchers' findings (Hubbard Mc Cree, Sharpe,

Brandt, & Robertson, 2007; Cowan & Hawkins, 2007). Despite the continued advances in technology and the use of that technology, as well as the plethora of sources of information, patients are indicating that the personal contact with their healthcare provider is important to them in terms of information about their medical condition.

Patients are now being encouraged to become more involved in their care (Purbrick, Tu, & Damato, 2006; Sainio; Lauri, & Eriksson, 2001) and may seek information prior to meeting with their healthcare professional. Further, increased workloads, and earlier discharges (Irurita & Williams, 2001) may make it more difficult for healthcare staff to spend adequate time educating their patients. In addition, longer life expectancies, and higher number of individuals living with chronic illnesses increase the need for accessible and accurate information to facilitate selfcare at home (Cowan & Hoskins, 2007).

In this study, the Internet was the third highest rated category. In the past ten years computers have become common in Canadian households. Much of the information that is available on the Internet is not regulated. It is estimated that less than half of the patients do not discuss the information they have found through different sources with their healthcare professional (Entwistle, et al., 2006).

Patients need access to accurate and timely information regarding their medical condition. Healthcare providers need to ensure there is adequate time to discuss the information with their patients. It is important that healthcare providers are aware of the information that is being sought, the source, and level of comprehension.

Implications for Nursing

As indicated by patients, healthcare professionals are an important source of information. Earlier discharges and increased workloads are challenges that greatly interfere with the amount of time spent with patients. More strategies need to be implemented to overcome these challenges and ensure patients are able to access nurses for support, information and resources in a timely manner.

Limitations of the Study

There are a few limitations to this study. First, the timing of retrieving the data may have influenced patient reported levels of overall quality of care. The data for the larger study was collected prior to discharge from the

hospital. Patients may not have had enough time to reflect on the provision of care while in the hospital, or they may have been worried about healthcare professionals knowing what they had said or preoccupied about their current health status and planning for discharge. Once discharged patients may have additional time in a familiar environment to reflect on the care received. This limitation is balanced by the fact that it may be more difficult to obtain the information once the patient is in the home environment. Therefore, it may be beneficial to a survey prior to discharge and once the patient has been discharged.

Conclusion

Additional research is needed to determine whether the preferred source of information varies with cultural and generational differences and the impact this has on the perceived level of quality of care and involvement in decision making. In addition, more research is needed to evaluate patient preferences and how well we are meeting the educational needs of patients in Canadian hospitals. Exploration of these factors may assist in determining whether the educational methods healthcare professionals have traditionally relied on remain effective or if these methods need to be adapted to meet the changing needs of our patients. It is likely patients will indicate a willingness to be more involved in decision making of their healthcare and this will need to accommodated and supported to ensure the continued provision of quality healthcare.

References

- Barlesi, F., Boyer, L., Doddoli, C., Antoniotti, S., Thomas, P., & Auquier, P. (2005). The place of patient satisfaction in quality assessment of lung cancer thoracic surgery. *Chest Journal*, 128(5), 3475-3481.
- Boer, M. J., Versteegen, G. J., & Van Wijhe, M. (2007). Patients' use of the Internet for pain-related medical information. *Patient Education and Counseling*, 68, 86-97.
- Canadian Instutite for Health Information. (2006). Comparable health and health system performance indicators for Canada, the provinces and territories. Retreived from http://secure.cihi.ca/cihiweb/dispPage.jsp?cw_page=home_e
- Canadian Instutite for Health Information. (2010). *Health indicators*. Retreived from http://secure.cihi.ca/cihiweb/dispPage.jsp?cw page=indicators e
- Chang, J. T., Hays, R. D., Shekelle, P. G., MacLean, C. H., Solomon, D. H., Reuben, D. B., Roth, C. P., Kamberg, C. J., Adams, J., Young, R. T., & Wenger, N. S. (2006). Patients' ratings of their healthcare are not associated with the technical quality of their care. *Annals of Internal Medicine*, 144(9), 665-672.
- Cowan, C., & Hoskins, R. (2007). Information prefences of women receiving chemotheratpy for breast cancer. *European Journal of Cancer Care, 16*(6), 543-50.
- Entwistle, V., Williams, B., Skea, Z., MacLennan, G., & Bhattacharya, S. (2006). Which surgical decisions should patients participate in and how? Reflections on women's recollections of discussions about variants of hysterectomy. *Social Science & Medicine*, 62, 499-509.
- Field, A. (2009), Discovering statistics using SPSS. (3rd ed.). London, England: SAGE Publications Ltd.
- Health Insurance Portability Information Act. (2006). Retreived from http://guideproductions.com/services/web/hipaa/
- Hubbard Mc Cree, D., Sharpe, P. A., Brandt, H. M., & Robertson, R. (2007). Preferences for sources of information about abnormal pap tests and HPV in women tested for HPV. *Preventive Medicine*, 43, 165-170.
- Irurita, V. F., & Williams, A. M. (2001). Balancing and compromising: nurses and patients preserving integrity of self and each other. *International Journal of Nursing Studies*, 38, 579-589.

- Kinnear, P.R, & Gray, C.D. (2010). PASW statistics 17 made simple. NY, United States: Psychology Press.
- Lamb, G. S., Mowinski-Jennings, B., Mitchell, P. H., & Lang, N. M. (2004). Quality agenda: priorities for action recommendations of the American Academy of Nursing Conference on healthcare quality. *Nursing Outlook*, 52(1), 60-65.
- Lee, M. A., & Yom, Y. H. (2006). A comparative study of patients' and nurses' perceptions of the quality of nursing services, satisfaction and intent to revisit the hospital: A questionaire survey. *International Journal of Nursing Studies*, 44, 545-555.
- Lepnurm, R., Dobson, R. T., & Backman, A. M. B. (2003). If the pillars are shaky, does faith in medicare crumble? *Healthcare Management Form*, 16(1), 11-16.
- Lockhart, W. (2007). The views of physicians on health care quality. (Doctoral dissertation). Retrieved from http://library2.usask.ca/theses/available/etd-04022007-110353/unrestricted/lockhart.pdf
- Lynn, M. R., McMillian, B. J., & Sidani, S. (2007). Understanding and measuring patients' assessment of the quality of nursing care. *Nursing Research, May/June*, 56(3), 159-165.
- Mathiesen, T. P., Willaing, I., Freil, M., Jorgensen, T., Andreasen, A., Ladelund, S., & Harling, H. (2007). How do patients with colorectal cancer perceive treatment and care compared with the treating healthcare professionals? *Medical Care*, *45*(5), 394-400.
- Proude, E. M., Shouriw, S., Conigrave, K. M., Wutzke, S. E., Ward, J. E., & Harber, P. S. (2004). Do elective surgery patients use the Internet to look for information about their condition? *ANZ J. Surg.*, 74, 304-307.
- Purbrick, R. M. J., Tu, K. L., & Demato, B. E. (2006). The patient's role in the decision-making process-a perspective from the liverpool ocular oncology centre. *Eye*, 1034-1039.
- Sainio, C., Lauri, S., & Eriksson, E. (2001). Cancer Patients' views and experiences of participation in care and decision making. *Nursing Ethics*, 8(2), 97-113.

- Spence Laschinger, H., McGillis Hall, & Almost, J. (2004). A psychometric analysis of the patient satisfaction with nursing care quality questionnaire; an actionable approach to measuring patient satisfaction. *Journal of Nursing Care Quality*, 20(3), 320-230.
- Statistics Canada. (2004). Innovation Analysis Bulletin, 6(3), 1-28. Retrieved from http://www.statcan.gc.ca/pub/88-003-x/88-103-x2004003-eng.pdf
- Statistics Canada. (2008). The Daily. Retrieved from http://www.statcan.gc.ca/daily-quotidien/080221/dq080221c-eng.htm
- Statistics Canada. (2010). Internet use by individual, location of access, by province. Retrieved from http://www40.statcan.gc.ca/l01/cst01/comm36a-eng.htm
- Thorsteinsson, L. (2002). The quality of nursing care as percieived by individuals with chronic illnesses: the magical touch of nursing. *Journal of Clinical Nursing*, 11, 32-40.
- Wensing, M., & Elwyn, G. (2003). Improving the quality of healthcare: Methods for incorporating patients' views in healthcare. *BJM*, 326, 877-879.

Table 1 Gender

Gender	Frequency	Percent
Male	203	53.7
Female	175	46.3
Total	378	100

Table 2 Medical Conditions

What is the medical condition you are being treated for?		
Condition	Frequency	Percent
Myocardial		
Infarction		
	132	34.9
Cerebral Vascular		
Disease	74	19.6
Prostate Disease	67	17.7
Hysterectomy	105	27.8

Table 3 Sources of Information

Source of Information	Frequency	Percent
Medical Doctor	305	80.7
Registered Nurse	99	26.2
Internet	68	18
Family	65	17.2
Friends	52	13.8
Relatives	25	6.6
TV	16	4.2
Magazine	18	4.8
Hospital	37	9.8
Health Unit	18	4.8
Pamphlets	52	13.8

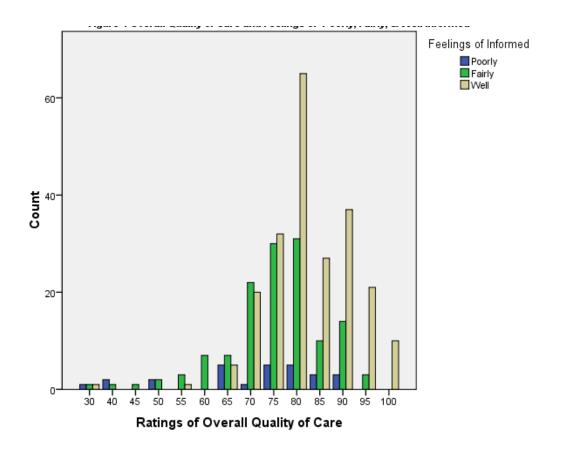
Table 4 Individual Sources of Information and Quality of Care

Variables	Overall Quality of Care	
Medical Doctor		0.23
Registered Nurse		0.102
Hospital		0.077
Health Unit		0.081
Family		0.068
Relatives		-0.09
Friends		-0.015
Internet		0.046
TV		-0.01
Magazines		0.004
Pamphlets		0.067

Table 5 Sources of Information and Overall Quality of Care

Variables	Overall Quality of Care
All Sources	.119*
Formal Sources	
MD, RN, Hospital, & Health Unit	.238**
Family Sources	
Family, Relatives, & Friends	-0.076
Media Sources	
Internet, TV, Magazine, &	0.056
Pamphlet	
	** p < .01
	*p < .05

Figure 1 Overall Quality of Care and Feelings of Poorly, Fairly, & Well Informed



CHAPTER THREE

DISCUSSION AND CONCLUSION

The current study examined the ratings of overall quality of care correlated with feelings of informed, decision making and preferred sources of information. Discussion of hypothesis # 1 is located in Manuscript A, and hypothesis # 2 and # 3 is located in Manuscript B. The hypothesis # 4 and # 5 are discussed in the current section. In addition, this chapter will review results of the current study and provide some considerations for nursing practice.

Additional Findings

There are additional insights gleaned from the data that were beyond the scope of the two manuscripts included in this thesis. The first point is the comparison across three of the questions of interest: decision making, feeling well or poorly informed and the ratings of quality of care. Based on the findings from the earlier comparisons, it was hypothesized that patients who reported decreased involvement in medical decision making would result in feelings of being poorly informed and report lower overall ratings of quality of care. Therefore, a strong correlation (r < .6) was expected with these three factors. In this sample, patients who did not feel well informed were likely to report lower ratings of quality of care, and less likely to participate in decision making regarding their medical care. A medium strong correlation of r = .47, $p = \le .001$ (1 tailed) was found when comparing the overall quality of care, involvement in decision making of medical care, and ratings indicating feelings of being poorly informed (Table 1). The correlation was slightly smaller than expected. Another question related to the correlations among the factors examined was whether patients who indicated the preferred source of information was the doctor or nurse would report higher ratings of overall quality of care, indicate feelings of being fairly or well informed, and indicate increased involvement in decision making in relation to their medical condition. Here a large correlation (r < .6) was hypothesized, based on the literature outlined earlier. The majority of patients (77%) who indicated their preferred source of information was their doctor and/or nurse rated the overall quality of care fair or good. In addition, the patients who rated the overall quality of care as fair or good indicted high involvement in decision making (58%) (Figure 1). A correlation of r = .36, $p = \le$.001(1 tailed) was found with involvement in decision making of medical care and feelings of poorly, fairly, or well

informed. The correlation with the overall quality and preferred source of information being the doctor was r = .23, $p = \le .001(1 \text{ tailed})$ was smaller than expected. The correlation with the doctor as the preferred source of information and feelings of being well informed was r = -.29, $p = \le .001(1 \text{ tailed})$. This finding is consistent with hypothesis. The correlation with the overall quality of care and preferred source of information being the nurse was a small effect of r = -.10, $p = \le .001(1 \text{ tailed})$. The small correlation between the doctor and involvement in decision making was consistent with the hypothesis, indicating a correlation between patient involvement in decision making and overall ratings of quality of care. In addition less than 5% of patients who rated preferred sources of information as family, relatives, friends, Internet, TV, magazines, and/ or pamphlets indicated high involvement in decision making.

Patients had six options in the question that asked about decision-making. Given that the results were widespread, the data was broken down to each option (six mini data sets) and then correlated with perceptions of overall quality of care and feelings of being well informed. Further analysis showed a slight increase, with a medium effect (r = .5, $p = \le .001$) was found when comparing high involvement in decision making, overall quality of care and feelings of being well informed. In addition, patients who indicated ratings of "We discuss the situation with the doctor and I decide" resulted 100% of those patients indicating they were fairly or well informed.

Patient ratings of quality of care were higher when increased involvement in medical care and feelings of being fairly or well informed were reported (using a scale of poorly, fairly or well informed). When patients indicated "We discuss situation with doctor and I decide", 88% (n = 42) patients indicated ratings of quality of care between 75 to 100 (using a scale of 0 to 100, 0 indicates quality of care received was non-functional, 10 to 40 indicates care was terrible to poor, 50 to 60 indicates care was passable or adequate, 70 to 90 indicates care was good to excellent, and a rating of 100 indicates quality of care was perfect). Similar findings were noted with patients who indicated "We discuss situation and both decide" (87% (n = 117) and those indicating "We discuss my views then doctor decides" (81% (n = 47) who indicated ratings of overall quality of care between 75 and 100. Therefore, higher levels of overall quality care are reported when patients are more involved in decision making in their medical care, and feel fairly or well informed about their medical condition.

Further analysis of being less involved in medical care resulted in lower levels of ratings of overall quality of care. However, it is interesting to note there was only a slight decrease in ratings of feeling fairly or well informed.

This demonstrates that some patients still feel fairly or well informed even when they are reporting lower levels of involvement in decision making about their medical care.

In addition, further analysis was completed with age and health status (Table 1). Participants between the ages of 40 to 49 were the highest age range to indicate their health was worse than most people their age. It is interesting to note patients 50 years and older rated their overall health more positively than the younger age groups. A high majority (90%) of patients 80 to 89 years of age rated their health status as the same or better than most people their age. When patients were asked" after treatment in the hospital how well do you expect to recover", the highest majority (68%) who selected "very good" and "excellent" was patients aged 40 to 49. Over half of the patients aged 70 to 79 years of age indicated "good" and "very good" (69%). It is interesting to note that older patients indicated a healthier outlook about the current health status and expected recovery. In addition, throughout the analysis there was enough power to be confident in the results.

Patient Perspectives

Research suggests that the majority of patients prefer taking an active role in decision making or being asked their opinion (Purbrick, Tu, & Damato, 2006; Sainio, Lauri & Eriksson, 2001). This study supports these findings. Increased involvement in medical care has resulted in increased patient satisfaction, coping, health status, and self management with healthcare (Baker, 2006; Bastianens, Royen, Pavlic, & Raposo, 2007; Eldh, Ekman, & Ehnfors, 2006; Harvey, 1999; Purbrick et al., 2006). Patients with high levels of satisfaction are more compliant with following their treatment plans (Spence Laschinger, McGillis Hall, & Almost, 2004). Involvement in decision making promotes greater health outcomes, and influences patient perceptions of quality of care and feelings of being well informed.

Many factors affect the patient's ability to participate in decision making in their medical care. Patient involvement may be affected by age, severity of health condition, level of education, psychosocial condition, level of

knowledge of condition, cultural assumptions of normal behavior, and opportunities presented for involvement (Bastianens et al., 2007, Becker, & Douglas 2008; Eldh, Ekman, Enfors, 2006; Harvey, 1999; Entwistle, Williams, Skea, MacLennan, Bhattacharya, 2006; Sainio, Lauri, Eriksson, 2001).

Earlier discharges from hospitals, longer life expectancies, and higher number of individuals living with chronic illnesses increase the need for accessible and accurate information to facilitate self care at home (Cowan & Hoskins, 2007). In the past, patients relied largely on healthcare professionals to provide information on their medical conditions. More recently, the Internet has become widely accessible, and offers a wealth of information to patients (Proude, Shouriw, Conigrave, Wutzke, Ward, & Harber, 2004; Purbrick et al., 2006). More patients are using the Internet as a source of information (Boer, Versteegen & Van Wijhe, 2007). Despite the advances in technology, results of the current study indicate the human touch is still preferred to the Internet. Many patients still prefer the healthcare provider to be the main and most trusted source of information (Cowan & Hoskins, 2007; Hubbard, Sharpe, Brandt, & Robertson, 2007.

Patients who regularly access the Internet for information on their condition and options for care may be more knowledgeable and this may impact their expectations in the level of decision making (Entwistle et al., 2006). In addition, there are many sources of information available on the Internet, some of which are more credible than others (Boer, Versteegen, & Wijhe, 2007; Cowan & Hoskins, 2007). Patients may not be able to decipher the quality of information presented. If patients do not fully understand or are unaware that some of the information they are accessing may be inaccurate, it may affect their contribution to decision-making and then the perceived level of quality.

If the goal of health care professional is patient participation in decision making, additional efforts must be made to ensure the patients are in fact, well informed. Increased patient involvement may affect the way nursing education and care are provided. Nurses will need to ensure acceptance and encouragement is provided to patients who would like to be more involved in decision making of their medical care.

It was found that patient ratings of the overall quality of care, involvement in decision making regarding medical care, and feelings of being well, fairly or poorly informed were interrelated and interdependent. Thus health professionals must attend both to knowledge and opportunity for discussion and participation. This will enable more patient involvement and higher reported levels of overall quality of care.

Discussion

Results of the current study supported reviews of the literature where patients who do not receive accurate and appropriate information will indicate lower overall satisfaction with the quality of healthcare. Patients often view not receiving an adequate amount of information as difficult and researchers have found it affects patient's perceived level of satisfaction with the quality of their care (Sainio et al., 2001). These findings are consistent with the results of the current study.

Patients who are able to take an active role in decision making regarding their medical care are more likely to report higher levels of satisfaction with the overall quality of care. Studies within the U. S. have reported that increased involvement in medical care has resulted in increased patient satisfaction, coping, health status, and self-management with healthcare (Baker, 2007; Bastianens et al., 2007; Eldh, Ekman, & Ehnfors 2006; Harvey, 1999; Purbrick, Tu, & Damato, 2006). Patients who feel the doctor does not consider their views, will likely report feelings of being not well informed. Sainio, Lauri & Eriksson (2001) found "Patient access to adequate and comprehensible information was considered to be an important precondition for participation" (p. 102). The findings of the current study are congruent with the review of literature. Patients who were actively involved in decision making of their medical care and options for treatment indicated higher ratings of the overall quality of care. Patients who indicated "doctor does not listen, and decides" resulted in lower ratings of feelings of being fairly or well informed and overall ratings of quality of care. Given the findings of this study, it is important to note that this was only a small percentage of the sample.

Patients who prefer to obtain information about their medical condition from their nurse and doctor may report higher levels of overall satisfaction with quality of care in comparison to obtaining information from other sources, such as family or TV. In addition these patients may be more apt to participate in decision making regarding their condition and report feelings of being well informed about their medical condition and options for treatment. Accurate information will increase their involvement in decision making and the patient will be able to make sound and valid decisions regarding their care. Patients often view not receiving an adequate amount of information as difficult and researchers have found it affects patient's perceived level of satisfaction (Sainio et al., 2001).

Results of the current study indicated the top three preferred sources of information were doctor, nurse, and the Internet, although the doctor was clearly much higher than the other two sources. The health unit and hospital had less than 10% of ratings and were rated lower than family, friends and relatives. The health unit and hospital should be able to provide valuable and credible information. It is not known why patients rated these sources so poorly. Further research in this area would be able to identify why these sources are not preferred.

Limited knowledge may decrease the patient's desire to participate in decision making within ones' own medical care (Irurita & Williams, 2001). Patients who indicated lower levels of overall quality of care reported feelings of not being well informed and did not take an active role in decision making regarding their medication condition. Patients who receive and participate in opportunities to be involved in decision making regarding their medical condition may increase the patient's overall satisfaction with care (Harvey, 1999). Results indicated patients who were actively involved in decision making in relation to their medical care were more apt to indicate higher ratings of quality of care. In addition, these same patients rated feelings of being fairly or well informed. It is important for healthcare providers to ensure opportunities are provided for patient education and involvement in decision making of their medical care. Results of the current study support positive outcomes for patients when they feel well informed and actively involved in making decisions about their healthcare.

Research suggests that providing information that is relevant to individual needs, the manner the information is presented, and allowing adequate time for providing and obtaining necessary information to and from the patient, are all areas that need to be considered to promote active involvement in decision making (Irurita & Williams, 2001).

Results of this study supported the findings in the literature. However, the area of how the information was provided was not explored in the current study.

In summary findings of the current study indicated a moderately high overall rating of quality of care. Increased involvement in decision making regarding medical care and options for treatment, and feelings of being fairly or well informed were associated with higher ratings of overall quality of care. In addition, the evaluation of the preferred source of information indicated the human touch is still preferred. The results of the current study support some of findings indicated in previous research and literature. However, an exploration about the methods used to provide patient information was not explored in the current study.

NURSING IMPLICATIONS AND CONCLUSIONS

Implications for Nursing

Decreased quality of care in hospitals affects patients, staff and the healthcare sectors. Poor care can be costly to the province, the healthcare sector, and to patients and their families (Downie et al, 2006). Patients and families are greatly affected by the standard of care, both physically and emotionally, and sometimes economically, for long periods following the event. Ensuring quality optimizes patient care and assists in effective utilization of fiscal resources.

Inadequate resources, limited staffing, and earlier discharges are some of the challenges that continues to affect the nursing profession (Lynn, McMillian, & Sidani, 2007) and its ability to provide quality care. These challenges greatly affect the amount of time spent with patients and potentially reflect on the quality of the therapeutic relationship between the patient and the nurse. Establishing a strong therapeutic relationship has been the basis for nurse patient interactions: influencing communication, the development of trust, willingness to adhere to clinical treatment plans, and potentially the health outcomes of the patient.

All of the results in this study pointed to the notion that increased therapeutic communication and time with patients was helpful in increasing patients' knowledge and information needs, as well as opportunities to discuss their condition. From this human communication, came a perception of higher quality of care. Thus nurses need to have the

time to spend with their patients, both to build a therapeutic relationship and to assess and meet patient's knowledge needs.

Results indicated the top preferred source of information was the Medical Doctor (81%) and second was the Registered Nurse (26%). There was a wide range between the two sources, which indicated that nurses may be still seen as the "helpers" to physicians versus knowledgeable health care providers. It may be attributed to traditional views that nurses are not seen as equal members of the medical team. More exploration is needed to determine why nurses are rated so much lower than physicians.

A review of the literature indicated the number of patients utilizing the Internet as a source of information is increasing. Results of the current study supported these findings, as the Internet was rated the third highest preferred source of information. Despite the growing numbers of patients who utilize the Internet as a source for medical information, many patients still prefer the healthcare provider to be the main and most trusted source of information (Cowan & Hoskins, 2007; Hubbard, Sharpe, Brandt, & Robertson, 2006).

Nursing professionals have a primary role in educating patients. Results indicated the importance of patients feeling well informed and how levels of being informed are related to participation in decision making and ratings of overall quality of care. When patients are effectively educated on their condition, treatments, and changes that need to be made to maintain optimum health, patients indicate increased satisfaction with care, higher quality of life, increased compliance to their treatment plan, and increased empowerment (Syx, 2008).

Challenges in staffing have lead to other disciplines taking over some of the roles and responsibilities of the nurse. Nursing professionals have an important and vast role in delivering healthcare, it is unlike any other. The Canadian Nurses Association (CNA) state, "Registered Nurses coordinate healthcare, deliver direct services and support clients in their self care decisions and actions in situations of health, illness, injury and disability in all stages of life" (p. 10, 2007). Nursing professionals are a highly educated and a regulated body of professionals. It is questioned whether other disciplines are qualified to take over some of these roles and responsibilities. More strategies

need to be developed to keep nursing professionals in their primary roles, rather than meeting staffing levels with less qualified staff.

In the past decade, there has been an increased awareness in promoting quality care. It is important that Registered Nurses are given the resources needed to provide optimal care to their patients. In addition, the nursing profession needs to encourage patient involvement in healthcare at a greater level. Lamb, Mowinski-Jennings, Mitchell, & Lang (2004) state "Consumer's have not been adequately involved in the quality movement" and "strategies are needed to encourage national debate on quality of health care from the patient's perspective" (p. 62). A joint effort may assist in the development of strategies needed to promote and maintain the provision of high quality care in Canadian hospitals.

Results of the current study indicated patient ratings of overall quality of care of 79 using a scale of 0 to 100. This indicates a moderately high rating of quality of care in the good to excellent range. The current study did not evaluate nursing perceptions on the provision of quality of care. It would be valuable to compare the two perspectives and determine if there were differences between the two perspectives.

CONCLUSIONS

The current study indicated a moderately high overall rating of quality of care. Ongoing measurement in these areas will assist in the development of strategies to improve the delivery of healthcare in our hospitals. Increased measurement of patient perspectives and increased patient involvement in the development of strategies will only benefit the provision of optimal nursing care; as patients are the recipients of healthcare and nursing professionals are the primary healthcare providers in our hospitals. Optimal patient care is a continuous goal and responsibility of all professionals and paraprofessionals involved in the delivery of healthcare.

Increased involvement in decision making regarding medical care and options for treatment, and feelings of being fairly or well informed were associated with higher ratings of overall quality of care. In addition, the evaluation of the preferred source of information indicated the human touch is still preferred. The results of the current study

support some of findings indicated in previous research and literature, however, there is a great need for further research including Canadian research surrounding the patient's perceptions about the quality of their care.

References

- Baker, G. R., (2006). Strengthening the contribution of quality improvement research to evidence based health care. *Quality Safe Health Care*, 15, 150-151.
- Barlesi, F., Boyer, L., Doddoli, C., Antoniotti, S., Thomas, P., & Auquier, P. (2005). The place of patient satisfaction in quality assessment of lung cancer thoracic surgery. *Chest Journal*, *128*(5), 3475-3481.
- Bastiaens, H., Royen, P. V., Pavlic, D. R., Raposo, V., & Baker, R. (2007). Older people's preferences for involvement in their own care: A qualititative study in primary health care in 11 European countries. *Patient Education and Counseling*, 68, 33-42.
- Becker, F., & Douglas, S. (2008). The ecology of the patient visit: physical attractiveness, waiting times, and perceived quality of care. *The Journal of Ambulatory Care Management*, 31(2), 128-141.
- Boer, M. J., Versteegen, G. J., & Van Wijhe, M. (2007). Patients' use of the Internet for pain-related medical information. *Patient Education and Counseling*, 68, 86-97.
- Canadian Instutite for Health Information. (2006). Comparable health and health system performance indicators for Canada, the provinces and territories. Retreived from http://secure.cihi.ca/cihiweb/dispPage.jsp?cw page=home e
- Canadian Instutite for Health Information. (2010). *Health indicators*. Retreived from http://secure.cihi.ca/cihiweb/dispPage.jsp?cw_page=indicators_e
- Canadian Nursing Association. (2007). Framework for the practice of Registered Nurses in Canada. Retreived from http://www.cna-aiic.ca/CNA/documents/pdf/publications/RN_Framework_Practice_2007_e.pdf#page=10
- Cheng-Chen, C., Tsorng-Yeh, L., Chi-Chen, S., Shu-Shan, L. & Li-Fang, C. (2006). Husbands' experiences before wives' hysterectomy. Journal of Nursing Research, 14(2), 113-121.
- Cowan, C., & Hoskins, R. (2007). Information prefences of women receiving chemotheratpy for breast cancer. *European Journal of Cancer Care*, 16(6), 543-50.

- Downie, J., Lahey, W., Ford, D., Gibson, E., Thomson, M., Ward, T., McDonald, F., & Shea, A. (2006). *Patient safety law: Fr*om silos to systems. Retrived from http://www.patientsafetylaw.ca/documents/Patient_Safety_Main_Report_final.pdf
- Durieux, P., Bissery, A., Dubois, S., Gasquet, I., & Coste, J. (2008). Comparison of health care professionals' self assessments of standards of care and patients' opinions on the care they received in hospital: Observational study. Retrieved from http://gshc.bmj.com
- Eldh, A. C., Ekman, I., & Ehnfors, M. (2006) Conditions for patient participation and non-participation in health care, *Nursing Ethics*, 13(5), 503-514.
- Entwistle, V., Williams, B., Skea, Z., MacLennan, G., & Bhattacharya, S. (2006). Which surgical decisions should patients participate in and how? Reflections on women's recollections of discussions about variants of hysterectomy. *Social Science & Medicine*, 62, 499-509.
- Ervin, N. E. (2006). Does patient satisfaction contribute to nursing care quality? *The Journal of Nursing Administration 16* (3), 126-130.
- Field, A. (2009), Discovering statistics using SPSS. (3rd ed.). London, England: SAGE Publications Ltd.
- Harvey, R. M. (1999). Decision-making preference and opportunity in VA ambulatory care patients; association with patient satisfaction. *Research in Nursing & Health*, 22, 39-48.
- Garralt, A. M., Bjaertnes, O. A., Krogstad, U., & Gulbrandsen, P. (2008). The outpatient experiences questionnaire (OPEQ); Data quality, reliability, and validity in patients attending 52 Norwegian hospitals. *Qual Saf Health Care 14*, 433-437.
- Health Insurance Portability Information Act. (2006). Retreived from http://guideproductions.com/services/web/hipaa/
- Howell, E., Graham, C., Hoffman, A., Lowe, D., Mckevitt, C., Reeves, R., & Rudd, A. G. (2008). Retrieved from http://gshc.bmj.com
- Hubbard, D., Sharpe, P. A., Brandt, H. M., & Robertson, R. (2007). Preferences for sources of information about abnormal pap tests and HPV in women tested for HPV. *Preventive Medicine*, *43*, 165-170.

- Irurita, V. F. (1999). Factors affecting the quality of nursing care: the patient's perspective. *International Journal of Nursing Practice*, *5*, 86-94.
- Irurita, V. F., & Williams, A. M. (2001) Balancing and compromising: nurses and patients preserving integrity of self and each other. *International Journal of Nursing Studies*, 38, 579-589.
- Kinnear, P.R, & Gray, C.D. (2010). PASW statistics 17 made simple. NY, United States: Psychology Press.
- Kohn, L. T., Corrigan, J. M., & Donaldson, M. S. (2000). To Error is Human. Committee on Quality of Health Care in America, Institute of Medicine.
- Labarere, J., Francois, P., Auquier, P., Robert, C., & Fourny, M. (2001). Development of a French inpatient satisfaction questionnaire. *International Journal for Quality in Health Care*, *13*(2), 99-108.
- Lamb, G. S., Mowinski-Jennings, B., Mitchell, P. H., & Lang, N. M. (2004). Quality agenda: priorities for action recommendations of the American Academy of Nursing Conference on health care quality. *Nursing Outlook*, 52(1), 60-65.
- Lee, M. A., & Yom, Y. H. (2006). A comparative study of patients' and nurses' perceptions of the quality of nursing services, satisfaction and intent to revisit the hospital: A questionaire survey. *International Journal of Nursing Studies*, 44, 545-555.
- Lepnurm, R., Dobson, R. T., & Backman, A. M. B. (2003). If the pillars are shaky, does faith in medicare crumble? Health Care Management Form, 16(1), 11-16.
- Lockhart, W. (2007). The views of physicians on health care quality. (Doctoral dissertation). Retrieved from http://library2.usask.ca/theses/available/etd-04022007-110353/unrestricted/lockhart.pdf
- Lynn, M. R., McMillian, B. J., & Sidani, S. (2007). Understanding and measuring patients' assessment of the quality of nursing care. *Nursing Research*, *May/June*, *56*(3), 159-165.
- Mathiesen, T. P., Willaing, I., Freil, M., Jorgensen, T., Andreasen, A., Ladelund, S., & Harling, H. (2007). How do patients with colorectal cancer perceive treatment and care compared with the treating health care professionals? *Medical Care*, 45(5), 394-400.

- Pettersen, K. I., Veenstra, M., Guldvog, B., & Kiolstad, A. (2004). The patient experiences questionnaire; Development, validity and reliability. *International Journal in Health Care*, 16(6), 453-463.
- Proude, E. M., Shouriw, S., Conigrave, K. M., Wutzke, S. E., Ward, J. E., & Harber, P. S. (2004). Do elective surgery patients use the Internet to look for information about their condition? *ANZ J.Surg*, *74*, 304-307.
- Purbrick, R. M. J., Tu, K. L., & Demato, B. E. (2006). The patient's role in the decision-making process-a perspective from the liverpool ocular oncology centre. *Eye*, 1034-1039.
- Ramsay, J., Campbell, J. L., Schroter, S., Green, J., & Roland, M. (2000). The General Practice Assessment Survey: tests of data quality and measurement properties. *Family Practice*, 17(5), 372-379.
- Sainio, C., Lauri, S., & Eriksson, E. (2001). Cancer Patients' views and experiences of participation in care and decision making. *Nursing Ethics*, 8(2), 97-113.
- Schimdt, L. A. (2003). Patients perceptions of nursing care in the hospital setting. *Journal of Advanced Nursing*, 44(4), 393-399.
- Spence Laschinger, H., McGillis Hall, & Almost, J. (2004). A psychometric analysis of the patient satisfaction with nursing care quality questionnaire; an actionable approach to measuring patient satisfaction. *Journal of Nursing Care Quality*, 20 (3), 320-230.
- Styx, R.L. (2008). The practice of patient education: The theoretical perspective. *Orthopaedic Nursing*, 27(1), 50-54.
- Thorsteinsson, L. (2002). The quality of nursing care as percieived by individuals with chronic illnesses: the magical touch of nursing. *Journal of Clinical Nursing*, 11, 32-40.
- Tzeng, H., Ketefian, S., & Redman, R. W. (2002). Relationship of nurses' assessment of organizational culture, job satisfaction, and patient satisfaction with nursing care. *International Journal of Nursing Studies*, *39*, 79-84.
- Wensing, M., & Elwyn, G. (2003). Improving the quality of health care: Methods for incorporating patients' views in health care. *BJM*, 326, 877-879.

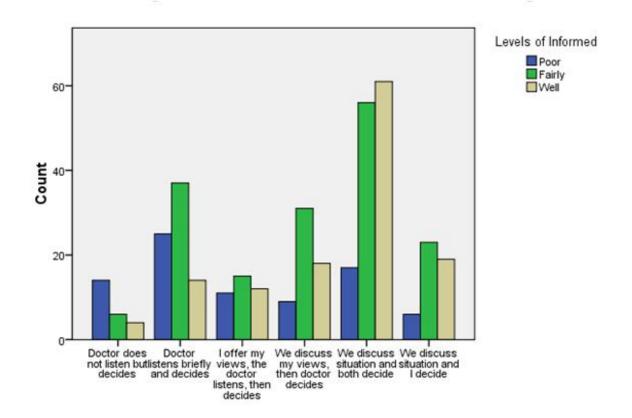
Table 1 Correlation between Quality of Care and Involvement in Decision Making

Variables	Overall Quality of Care
Involvement in Decision Making and Feelings of Poorly Informed	.471**
**p< 0.01	

Table 2 Age range and Health Status

		How was your being			
		Worse than most people your age	About the same as most people your age	Better than most people your age	Total
Age range	19 - 29	3	3	0	6
	30 - 39	5	7	3	15
	40 - 49	23	33	16	72
	50 - 59	10	37	14	61
	60 - 69	10	26	34	70
	70 - 79	14	38	42	94
	80 - 89	5	13	34	52
	90 - 99	1	3	4	8
Total		71	160	147	378

Figure 1 Levels of Informed and Decision Making



APPENDIX A: PATIENT SURVEY

Patients' Perspectives on Managing Quality of Care

Dear Patient

We would be grateful if you would complete this survey about the doctors and nurses who have been providing your care. This hospital wants to provide the highest standard of care. The results from this survey will enable the hospital to identify areas that may need improvement. Your observations and honest opinions are essential. There are no right or wrong answers and the staff will NOT see your survey.



National Quality & Policy Study
2009

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Hospital Care Assessment Questionnaire

Did your regular doctor admit you to the hospital? Did you come by Emergency admission?		Yes Yes		No No			
For which of the following medical conditions we Heart attack Stroke Prostate Hysterector	-		d in this	_	tal?		
Q1. Thinking about consultations with the doctor who had hospital, how would you rate the following:	as see	n you t	he mos	st, while	you h	ave been	in
a) How thoroughly the doctor asks about your symptoms and how you are feeling?	Very poor	Poor	Fair	Good	Very Good	Excellent	Does not apply
b) How well the doctor listens to what you have to say?							
c) How well the doctor puts you at ease during your physical examination?							
d) How much the doctor involves you in decisions about your care?							
e) How well the doctor explains your problems or any treatment that you might need?							
f) The amount of time your doctor spends with you?							
g) The doctor's patience with your questions?							
h) The doctor's caring and concern for you?							
i) The doctor's efforts to understand and respond to your worries about the outcome of treatment?							
j) The doctor's attention to your specific needs as an individual?							
k) After talking with the doctor, your understanding of the plan to treat your health problems?							
I) The quality of care provided by the doctor who saw you the most? Items a) to h) from Ramsey et al. (GPAS) Family Practice 2000; 17:372-379.							

$\ensuremath{\mathbf{Q2}}.$ Thinking about the nurses who looked after you. How many $\ensuremath{\mathbf{P}}$	nurses ap	peared to	be in ch	arge of y	our care	on the uni	t?
ONE nurse was in charge							
TWO nurses appeared to be in charge							
SEVERAL nurses appeared to be more or less equally re	esponsibl	e					
Q3. Thinking about consultations with the nurses who hospital, how would you rate the following:	nave se	en you	the m	ost, wh	ile you	have bee	en in
	Very poor	Poor	Fair	Good	Very Good	Excellent	Does not apply
a) How thoroughly the nurse(s) asks about your symptoms and how you are feeling?							
b) How well the nurse(s) listens to what you have to say?							
c) How well the nurse(s) puts you at ease during your physical examination?							
d) How much the nurse(s) involves you in decisions about your care?							
e) How well the nurse(s) explains your problems or any treatment that you might need?							
f) The amount of time your nurse(s) spends with you?							
g) The nurses' patience with your questions?							
h) The nurses' caring and concern for you?							
i) The nurses' efforts to understand and respond to your worries about the outcome of treatment?							
j) The nurses' attention to your specific needs as an individual?							
k) After talking with the nurse(s), your understanding of the plan to treat your health problems?							
I) The quality of care provided by the nurse(s) who saw? you the most? Items a) to h) from Ramsey et al, (GPAS) Family Practice 2000; 17:372-379 adaptation for nurses.	also by Ram	isey et al					

Q 4.	What are your o	bservations abo	out the nursing	unit where you	were looked at	fter:
a.	Attention to perso	onal needs such	as meals, use of	bathroom, walk	ing etc:	
	Very poor	Poor	Adequate	Good	Very Good	
b.	How often did the	e nursing staff lo	ok to see how yo	u were doing?		
	I felt ignored most of the time	The staff checked on me once each day	The staff checked on me a few times each day	The staff checked on me several times daily	e I felt that staff were around most of the tim	e
c.	Use of your call b	ell?				
	Did not have to use call bell	Used a few times and response was poor	Used several times and response was poor	Used a few times and response was good	Used several times an response was good	d
d.	Did staff treat you in	a dignified and re	spectful manner?	SECURE DE L'ARTE NA L'ARTE DE L'ARTE		
	Very disrespectful	Disrespectful	Appropriate	Respectful	Very respectful	
Q 5.	What are your ob	servations rega	arding the facilit	ies where you	received treatn	nent:
CONTRACTOR	Were the areas th	ATT OF EMPERORATE STATE OF THE PARTY.		NESSENIA DE CONTRA LA CONTRA DE		
	All areas were spacious	Most areas spacious	Some areas spacious	Most areas crowded	All areas were	
	, a dicas ii c v 3,00000	a few areas crowded	some areas crowded	a few areas spacious	crowded	
			Ц	Ш	Ц	
c.	Were the areas th	at you received of Most areas were clean	care in clean or c	-	AD	
	clean	some areas dirty	some areas dirty	Most areas dirty some areas clean	All areas were dirty	
d.	When diagnostic te		Acres against a service and a	NOTES - PROPERTY OF STREET AND STREET AND STREET AND STREET AS STREET AS STREET AND STREET AND STREET AND STREET AND STREET AS		
			t quickly or did you	wait in a cubicle	or corridor for a lo	ng time?
				vaiting, but Only conable	a short wait	io wait at all
	did everything	g appear to be in p	lace or were staff t	ussing with equip	ment or paperwor	k?
	Very disc	organized Dison	ganized In	place (Efficient v	ery efficient
	L.			l		
			of what was being		Dud.	uestions?
	very good e	explanations Good ex	planations Adequate	explanations Poor or r		xplanations
	Finally were		⊐ πied out in a dignifi	ed and respectful	manner?	
	Very disr					ry respectful
] [
						· ·

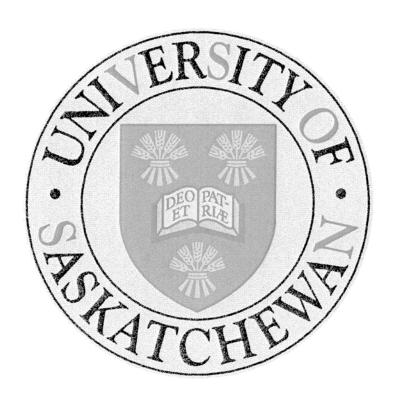
	J V EACH	L QUALITY	of care provi	ded to you	on this un	it, <i>using tl</i>	ne following	standard:
(0 =non-functional;	10 to 40=ter	rrible to poor; 50-	60=passable or a	idequate; 70-90	=good to exce	llent; 100= p	erfect);	
Don't know 0	10	20 30	40 50	60	70 80	90	100	
UR HEALTH								
26. After your to	reatment	s in hospital,	, the doctors	and nurses	s think yo	ur health	should be	,
Very poor	Poor	Fair	Good	Very Good	Excellent		Don't know	
					Ĺ			
7. As result of	treatmen	nt in hospital	how well de	you expec	t to recov	er?		
Very	poorly	Poorly	Fairly	Highly	Better t	han before		
8. How was yo	ur hoalth	eiv months	or so befor	a haina tras	tad in has	nital?		
o. How was yo	ui nean		n most people		Ted III IIOs	spitai r		
			me as most peop					
		Better than	n most people	your age				
10. Regarding	control o	ver your heal	th, have you	generally felf	t:			
completely in control		mostly in control	only part	tly in control	little	control	no contr	ol at all
11. Before this h	ospital adm	ission did you se		lowing health p or No for each)	rofessionals	in the last ye	ear?	
11. Before this h	ospital adm	nission did you se	(Indicate Yes		rofessionals Dietitian	in the last ye	ear? Naturopath	Heibalis
	Nurse	Pharmacist	(Indicate Yes	or No for each)	Dietitian			Herbaiis Yes
	Nurse	Pharmacist Yes	(Indicate Yes	or No for each) systotherapist cs Ye	Dietitian	Counsellor	Naturopath	
Ductor Yas Yes No No	Nurse	Pharmacist Yes	(Indicate Yes Chiropractor Pl Yes You	or No for each) avssotherapist ss Ye No nation about	Dietitian s	Counsellor Yes No	Naturopath Yes No	Yes
Yes Yes No	Nurse	Pharmacist Yes	(Indicate Yes Chiropractor Pl Yes YY No No No SEFUL inform (You may indicate)	or No for each) systotherapist to Ve	Dietitian s	Counsellor Yes No	Naturopath Yes No	Yes No
Yes Yes No	Nurse /ou obtain	Pharmacist Yes	(Indicate Yes Chiropractor Pl Yes YY No No No SEFUL inform (You may indicate)	or No for each) avsiotherapist yes No nation about ate more than one	Dietitian s	Counsellor Yes	Naturopath Yes No on that you h	No ave?

Finally, it will help us to understand your answers if you could tell us a little about yourself;

What kind of work or activities did you defined the second of the s	o <u>six months</u>	before being	admitted to	hospital?	
2. Do you consider yourself to be a part of a Yes Please specify which cultural or No 3. What languages are usually spoken at ho	r ethnic group?	iral or ethnic	c group a		
Expenses for health care are facts of life. pplies or therapies prescribed by your doctor of the policy of the prescription drugs, herbs etc.	What were you during the pa Not required	ur out of post year: Small out of pocket expense	Moderate out of pocket expense	Major out of pocket expense	Did not get du
non-prescription drugs, herbs etc.	during the pa	st year: Small out of	Moderate out of	Major out of	Did not get <u>du</u>
a) non-prescription drugs, herbs etc. b) prescription drugs, ointments etc. c) therapies such as physiotherapy, chiropractor,	during the pa	st year: Small out of	Moderate out of	Major out of	Did not get <u>du</u>
a) non-prescription drugs, herbs etc. b) prescription drugs, ointments etc. c) therapies such as physiotherapy, chiropractor, counselling etc l) equipment such as blood pressure monitor, electric	during the pa	st year: Small out of	Moderate out of	Major out of	Did not get <u>du</u>
a) non-prescription drugs, herbs etc. b) prescription drugs, ointments etc. c) therapies such as physiotherapy, chiropractor, counselling etc	during the pa	st year: Small out of	Moderate out of	Major out of	Did not get <u>du</u>
a) non-prescription drugs, herbs etc. b) prescription drugs, ointments etc. c) therapies such as physiotherapy, chiropractor, counselling etc l) equipment such as blood pressure monitor, electric wheelchair, oxygen etc	during the pa	st year: Small out of	Moderate out of	Major out of	Did not get <u>du</u>
a) non-prescription drugs, herbs etc. b) prescription drugs, ointments etc. c) therapies such as physiotherapy, chiropractor, counselling etc d) equipment such as blood pressure monitor, electric wheelchair, oxygen etc	Not required Not required	Small out of pocket expense	Moderate out of pocket expense	Major out of pocket expense	Did not get du to expense

Is there anything else you would like to say?

Thank you for taking time to complete this questionnaire.



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APPENDIX B ETHICS APPROVAL



Behavioural Research Ethics Board (Beh-REB)

Certificate of Re-Approval

PRINCIPAL INVESTIGATOR	DEPARTMENT	
Rein Lepnurm		Beh #
Kem Lephum	School of Public Health	07-197
INSTITUTION (S) WHERE RESEARCH WILL BE CARRIE	ED OUT	
University of Saskatchewan		
Saskatoon SK		
STUDENT RESEARCHER(S)		
Kim Montague		
SPONSORING AGENCIES		
CANADIAN INSTITUTES OF HEALTH RESEAR	CH (CIHR)	
TITLE:		
Managing Quality in Hospitals		
DE ADDRESS DE CO	PIRY DATE	
21 0 2010		
0/.	-Sep-2011	
Full Decord Manting (C)		
Full Board Meeting		
Delegated Review		

CERTIFICATION

The University of Saskatchewan Behavioural Research Ethics Board has reviewed the above-named research project. The proposal was found to be acceptable on ethical grounds. The principal investigator has the responsibility for any other administrative or regulatory approvals that may pertain to this research project, and for ensuring that the authorized research is carried out according to the conditions outlined in the original protocol submitted for ethics review. This Certificate of Approval is valid for the above time period provided there is no change in experimental protocol or consent process or documents.

Any significant changes to your proposed method, or your consent and recruitment procedures should be reported to the Chair for Research Ethics Board consideration in advance of its implementation.

ONGOING REVIEW REQUIREMENTS

In order to receive annual renewal, a status report must be submitted to the REB Chair for Board consideration within one month of the current expiry date each year the study remains open, and upon study completion. Please refer to the following website for further instructions: http://www.usask.ca/research/ethics_review/

Please send all correspondence to:

Research Ethics Office University of Saskatchewan

Box 5000 RPO University, 1607 - 110 Gymnasium Place

Saskatoon, SK S7N 4J8

Phone: (306) 966-2975 Fax: (306) 966-2069



Behavioural Research Ethics Board (Beh-REB)

Certificate of Approval Study Amendment

	Study Amename	;
PRINCIPAL INVESTIGATOR Rein Lepnurm	DEPARTMENT School of Public Health	Beh :/ 07-197
INSTITUTION(S) WHERE RESEARCH WILL University of Saskatchewan	BE CARRIED OUT	07-177
STUDENT RESEARCHER(S) Kim Montague		
SPONSORING AGENCIES CANADIAN INSTITUTES OF HEALTH RESE.	ARCH (CIHR)	
TITLE Managing Quality in Hospitals		
APPROVAL OF Addition of Kim Montague's Patient Questions	APPROVED ON 16-Dec-2009	CURRENT EXPIRY DATI 07-Sep-2010
Full Board Meeting	Date of Full Board Meeting:	
Delegated Review 🛛	g.	

the conditions outlined in the original protocol submitted for ethics review. This Certificate of Approval is valid for the above time period provided there is no change in experimental protocol or consent process or documents.

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