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Factors Affecting the Quality of Practitioner-Patient Communication (and Care): Implications for Medical Education

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Abstract

This study investigated the factors that affect the quality of communication during medical practitioner-patient encounters. To achieve this purpose, the study sought the perceptions of university student-participants using a quantitative-qualitative survey methodology. A significant number of the student- participants were enrolled in healthcare -related programs. Factor Analysis was conducted on the survey items followed by multiple regression analyses and ANOVA. The results of the study suggest that gender and ethnic concordance, doctor quality and medical dynamics are important factors regarding perceptions of case management satisfaction. Additionally, female practitioners were rated higher for case management satisfaction and quality of care. Based on these findings, the study recommends critical and progressive reforms of current medical education policies and curricula which have the potential to improve the quality of communication during medical encounters as well as overall patient care outcomes.

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Chapter 1: Introduction

Background of the Study

The medical system is a dynamic entity that is constantly evolving with innovations and advancements in medicine. Consequently, the system is the lifeline of the sick and a paragon of prestigious minds. It holds society's expectations of miraculous cures and a high level of life saving service. The reality however, is that the system has been challenged by the struggles it has encountered for decades. It is a complex system that is dualistically influenced by monetary objectives while attempting to meet human needs on compassionate grounds. By and large, this system lacks a humanistic and collaborative approach to healthcare. As a consequence, communication gaps exist amongst the various players in the medical system. Using an artistic analogy, the culture of the medical system can be described as an orchestra without a director whereby highly skilled musicians dominate their instruments, independently creating beautiful sounds but collectively only disharmony. The current healthcare system lacks guidance and control in certain areas which has continued to perpetuate ongoing issues such as poor medical outcomes related to patient satisfaction, recovery and adverse events that essentially, burden its entirety. The inclusion of the discipline of humanities in policy that relates to both medical education and practice is the key to changing the current state of affairs. The reform of medical education is the symphony director capable of presenting and instituting a framework that will bring balance and harmony to the operations and outcomes of medical practice. This is especially necessary in the area of provider-patient communications.

Although the practice of medicine utilizes knowledge derived from science related areas, it requires the ability to communicate effectively with patients in order to achieve optimal results for both the practitioner and the patient. During the practitioner-patient encounter there is an exchange of information that is vital to case management. The problem exists where a dualistic approach to care is needed that incorporates both science and humanities. Drawing on the work of novelist, Robertson Davies, Murray (2008), captures the essence of this argument:

> Can a Doctor Be a Humanist?, but said the title should be, Can a Doctor Possibly Be a Humanist in a Society That Increasingly Tempts Him to Be a Scientist?. He spoke of the caduceus, that symbol with the two serpents entwined on the staff, one Knowledge and one Wisdom. The legend said that the warring serpents were writhing on the ground but were pacified by Hermes who passed a staff between them. Davies said Knowledge and Wisdom aren't necessarily opponents, but they are opposites, and they must be reconciled and made supporters of each other. For the physician, knowledge comes from without, and from education and study, enabling him to help patients. Wisdom, on the other hand, is an introverted element of the doctor's psyche, coming from within... and it is what makes him look not at the disease, but at the bearer of the disease. It is what creates the link that united the healer with his patient, and the exercise of which makes him a true physician, a true child of Hermes. It is Wisdom that tells the physician how to make the patient a partner in his own cure. Instead of calling them Knowledge and Wisdom, let us call them Science and Humanism. (Murray, 2008)

As depicted in this poetic description of the caduceus which is the symbol for medicine, communication is a dynamic and vital component of healthcare services that is at the heart of medicine. According to Murray, (2008), it is the imbalance between humanities and bioscience that is leading to poor medical outcomes. As Murray (2008), further states, "Medicine is not a science. It is a caring profession that uses science" (p.2). Humanities is a broad term that includes many areas of study, however, medical humanities focuses on the values of the patient. The nature of humanistic medicine includes elements of humanities such as "values, philosophy, ethics, theology, history, literature, art, music, language, communicative competence and the social sciences as they relate to medicine, health and the human condition" (Murray, 2008, p.5). According to Murray, the majority of medical schools are science based and the programs are dehumanized. How does this ideology fit into the bigger picture of medical care?

There is communication at various levels of the system, each having a significant impact on the other. The macro level of the system provides policy and guidance for the micro levels. This information is communicated by way of legislature and curriculum that govern the meso level which includes health care organizations and educational institutions. According to Creswell (2003) "Examining theories at the micro-level provides explanation limited to small slices of time, space, or numbers of people, that explains how people engage in rituals of face-to-face interactions. Meso-level theories link the micro and macro levels" (p.121). Ultimately, the problems that exist with respect to communication during practitioner-patient encounters are impacted by the medical system as a whole. The dynamics of these micro-level encounters can be used to

understand the gap while the meso-level and macro-levels serve as the entities that are capable of bridging the gap with the assurance that theory will be put into practice. The problem that exists today is that policy does not address the needs of the medical system. Also, theory and research that have potential to create positive change to practitioner-patient communication is not being put into practice in medical training institutions which will be further discussed in the literature review of this study.

In addition to the importance of communication, health care as a system is multidimensional, inclusive of government legislation, institutional mandates and health professional practice. The dilemma that each of these facets encounters is clearly evident in the problems that the system as a whole is faced with today. The inherent weaknesses in the system relate to the lack of collaboration, the absence of a cohesive approach, and ultimately quality patient care. Medical cases that are not managed efficiently cost more due to the unresolved issues that persist in light of a patient's repeated visits to seek promising treatment. Meanwhile, academic and health institutions lack a focus on the human dimension of medicine. Unfortunately, the product of this neglect is confusion and misdirection of the entire medical culture. The whole is only as good as its parts.

Systems theory can be used to illustrate the philosophical premise underlying the potential benefits of change to the current system. Considering the complex nature of communication during medical encounters, systems theory directs focus towards seeking to find patterns of behaviour displayed during the linguistic exchange that offer insight pertaining to factors that impact communication. In relation to this study, several variables must be considered that are components of systems of interrelationships within a larger system.

The theoretical frameworks that have been referenced in this study and will be further discussed include the works of Etienne Wenger, communities of practice model, Norman Fairclough critical discourse analysis model and George Engel, biopsychosocial treatment approach model. These frameworks will help the reader to locate the area of focus and concern of this study and will be discussed further in the literature review section. Within the bigger picture model, the heart of the system is driven by key components being communication and education. Education informs the nature of the practitioner-patient interactions by having an influence on communication. The dynamics and nature of this exchange is vital to the success or failure of the practitioner-patient encounter.

Networking encourages the sharing of ideas, concepts, creativity and diversity which adds richness to the climate and operations of the medical culture. More importantly, the lack of humanities and the attendant problems in practitioner-patient encounters suggests that there is a need to incorporate more progressive approaches such as the biopsychosocial model to the entire medical culture. The biopsychosocial model is applicable to patients as a practitioner treatment approach. It is a holistic, humanistic approach as it requires the practitioner to consider the dynamic nature of the patient in its entirety. Considering the entire nature of the patient requires gathering information pertaining to the following states of the human condition; psychological, physical, physiological and social. An analysis of this model and its origins in Chapter 2 will explain its nature, applications and significance related to effective communication during practitioner-patient encounters.

Peer-to-Peer Roundtable is an official, formal gathering of health care professionals and top administrators that has recently been formed in Ontario, Canada to help improve the conditions of the health sector. Members are leaders in the health sector that have taken the initiative to network with each other and to address the problems in the medical field and have the power to influence policy within the political arena. The unique and highly informative nature of these gatherings provides opportunities for medical experts to network and collaborate on major issues in a real-time discussion format. At one of the most recent gatherings, the topic discussed was "Chronic Pain: A $10 Billion hit per year" (Ontario Peer-to-Peer Roundtable, 2007). Experts and researchers are just beginning to look more critically at the nature of the medical system's operations and the curriculum of medical schools in an attempt to find the root of the exorbitant costs of health care and the poor system outcomes.

Chronic pain has recently been considered an outcome of the medical system and is being considered seriously by legislation that governs medical professionals. According to Gatchel et al. (2007), the U. S. Congress now considers, chronic pain as such a major problem that it "designated 2001-2010 as the Decade of Pain Control and Research and the Joint Commission on Accreditation of Healthcare Organizations now requires physicians to consider pain as the fifth vital sign (added to the other vital signs of pulse, blood pressure, core temperature and respiration)" p.581),. The authors refer to pain as defined by the International Association for the Study of Pain as " unquestionably a sensation in part or parts of the body but it is also always unpleasant and therefore also an emotional experience" (Gatchel et al, 2007, p. 598). These writers also argue that the mental issues that are secondary to the illness and/or disease such as depression, anxiety,

anger and overall negative effect, further perpetuate the pain cycle and disrupt recovery. In addition to the emotional factors that contribute to the experience, cognitive factors such as appraisal and belief about pain including catastrophizing, fear-avoidance, self-efficacy, vulnerability and resilience also play a significant role in the pain experience. Lifestyle related illnesses which have the highest mortality today are related to the resultant health behaviours that are driven by these attitudes and beliefs. This makes it especially important for health practitioners to be aware of these hidden mechanisms that contribute to disease and illness. Underlying the health care cost is the idea that chronic pain is a sign of an unresolved medical problem, thereby suggesting that medical cases may not be managed in the most efficient manner and if so, how can this phenomenon be explained?

Gatchel et al. (2007) also argue compellingly that the experience of pain is unique to each individual and that practitioners should be aware of the potential development of these factors as they create barriers to recovery and perpetuate chronic pain. As a result, they recommend that practitioners need to be educated regarding the human experience of illness where, "patients with chronic pain are at increased risk for emotional disorders, maladaptive cognitions, functional deficits and physical deconditioning as well as basic nocicepetive dysregulation" (Gatchel et al., 2007, p.607). The authors believe that ultimately, the biopsychosocial treatment approach will not only be accompanied by optimal recovery but, will also be cost efficient. As the biopsychosocial treatment approach brings promise to the practitioner-patient encounter by way of improving the quality of communication, how can this treatment approach become an integral part of the everyday operations of the medical culture?

Beyond the activities of working groups such as the Peer-to-Peer Roundtable, major legislative changes involve the Ontario Ministry of Health and the Ontario Ministry of Education. It appears that transformational leadership is the style being utilized by medical experts and top administrators that are raising awareness in a collaborative fashion about the major issues that plague the medical culture such as ineffective practitioner-patient communication. They are actively pursuing changes as they themselves have experienced the negative impact of inadequate legislative policies regarding patient care. According to Suchman, (2005) " the leading edge in disseminating the biopsychosocial treatment approach lies in organizational transformation in critically examining expectations about patient and professional roles that are implicit in work processes and the ambient values in the health care work environment"(p.451). Additionally, the American Institute of Medicine has stressed the importance of these interrelationships stating that medical organizations should focus on patients' values and preferences (Committee on Quality of Health Care in America, Institution of Medicine as cited in Suchman, 2005). Governing bodies realize the importance of the quality of communication during practitioner-patient encounters and the issue is now in the spotlight and forefront of the attention of stakeholders in the medical system.

Policies regarding changes to include the biopsychosocial treatment model in practice and in medical education curriculum, will need to be spearheaded at both the federal and provincial levels of governance which would then provide direction for the next level of governance being the professional medical and allied health care institutions as well as associations that govern universities and colleges. These main governing bodies include the following: The Association of Faculties of Medicine in Canada (17

faculties of medicine), Canadian Association of Medical Education (grassroots organization of medical educators by medical educators), The Royal College of Physicians and Surgeons of Canada, The College of Family Physicians of Canada (conduct surveys), Medical Council of Canada (conduct examinations), Ministry of Health and the Ministry of Education. There is empirical evidence that support the need for change. However, the problem lies in determining how much change is required to policy and what exactly needs to be specified in government legislation.

Statement of Problem

Current research and theories show both the need and a growing interest to examine the experience of the provider and the patient in health care encounters (Brink-Muinen et al., 2002; Frankel & Quill, 2005; Gatchel et al., 2007; Haddock & Lyness, 2002; Katon & Kleinman , 1980 ; Margalit et al., 2004; Mavis et al., 2005; Pierson et al., 2007; Roter & Hall, 1998, 2002,2004; Schmid et al., 2007; Suchman, 2005; Vieder et al., 2002; White, 2002) . The consensus in current research strongly suggests that the reason for the gap between theory and practice relates to the lack of humanities related- knowledge and training for students in medical and allied institution. The result is reflected in poor patient outcomes where patients are not receiving optimal care, are dissatisfied and, experience more adverse events (Margalit, 2004). At the same time, the costs of health care are rising as the efficiency and effectiveness of medical case management is declining. Consequently, the system as a whole is bogged down with congestion related to the deficiencies of the referral process, case management and a lack of specialized multidisciplinary treatment approach. There is a serious dysfunction in practitioner-patient communication that challenges the effectiveness of the system. This

problem has resulted in serious adverse events where the poor management of patients has actually caused them harm (Katon, 1980).

Similarly, providers are experiencing negative and adverse effects related to poor communication not only with their patients but also with their colleagues and system administration (Brandi, 2000). In an attempt to remedy this problem, certain topics need to be addressed which include the types of treatment models utilized by practitioners, the factors that impact on communication during medical encounters and subsequently, what can be done to improve the effectiveness and efficiency of health care encounters for both practitioners and patients.

Purpose of Study

This study investigated what the current practice is in the medical culture for the purpose of proposing changes that will address the quality of communication during practitioner-patient interactions. Through survey, the study investigated the perceptions of University of Windsor medical and nursing students of communication during medical encounters. Although research exists which focuses on practitioner-patient interactions, there are few studies that specifically apply the biopsychosocial treatment approach to understand the interactions and how it impacts patient satisfaction and patient adherence to treatment outcomes.

Obtained through survey, the intention of this study was to investigate the perceptions of patients concerning the quality of communication during medical encounters. The Patient Healthcare Satisfaction Survey was designed by the researcher and administered to the participants. A major goal of the study was to gain insight

regarding the need for medical education reform related to communication based knowledge and skills that are necessary to manage medical cases effectively and efficiently. The inference derived from the quantitative and qualitative data of the study offers insights into the quality of the communication of interactions between practitioner and patients. This information should, in turn, contribute to improved practices in the medical arena.

Theoretical Frameworks

Several medical professional groups have researched the value and application of the biopsychosocial treatment approach to their particular field of study and have integrated it into their specific area of specialization (Arber et al., 2006; Grabsch et al., 2006; Morris, 2004; Gupta, 2007). Given that there is evidence suggesting the value and uses for the biopsychosocial treatment model in the medical field, what are the barriers to the implementation of the model in the entire health system? As the medical sector is an open social system, the influential factors that are capable of directing change must be considered. These factors include the need to consider legislation concerning the governance of medical practice and education, in addition to barriers that interfere with effective communication including power, gender and cultural disparities. In order to achieve best practice, all factors must be embedded in health and education policy thus mandating its practice while simultaneously addressing the barriers that threaten best practice outcomes. This present study will be philosophically grounded in the nature and dynamics of communication. Specifically, the study will draw from Norman Fairclough's research on critical discourse analysis, George Engel's biopsychosocial treatment approach and Etienne Wenger's Communities of Practice model. Each of these

perspectives is briefly described below. The nature and dynamics of communication includes consideration of attitudes, beliefs, stereotypes and prejudice related to the following influences or barriers to effective communication including perceptions related to power disparities, gender and cultural differences, communication styles and treatment approaches.

Norman Fairclough's (Fairclough & Wodak, 1997) critical discourse analysis research examines communication as an exchange that is influenced by several factors. Fairclough (2008) states that "discourse has in many ways become a more salient and potent element of social life and that processes of current social change often seems to be initiated and driven by changes in discourse" (p.2). It is a three dimensional framework including: analysis of discourse (events as instance of sociocultural practice), analysis of both spoken and written language text and analysis of discourse practice (process of text production, distribution and consumption) (Fairclough,2008). As defined by Fairclough, this theory gives insight into the way discourse reproduces or resists social and political inequality, power abuse or domination. With regards to the medical system, this linguistic exchange occurs at the micro-level where practitioner- patient interactions occur. For this reason, the nature of the linguistic exchange is examined in terms of the barriers as stated above that may be fostering poor outcomes related to patient satisfaction and patient adherence.

George Engel's research pertaining to the biopsychosocial treatment approach to care was revolutionary at the time of his academic work and was well received by the supporters of a holistic approach to medicine and challenged by those that believed in the value of the biomedical approach to care (Frankel & Quill, 2005). The biopsychosocial

treatment model requires a practitioner to consider the impact and the interaction of factors pertaining to the nature of the following aspects of a patient's case: 1) biological, 2) psychological, 3) sociological and 4) physiological. Whereas, a practitioner using the biomedical model is strictly concerned with the injury or aliment itself and not the interaction or influence of other factors. Although the focus of the study is the nature of communication during medical encounters, it is necessary to consider the nature of the environment in order to understand the context within which these encounters occur and the influences that the environment may have on the practitioners and patients. The biopsychosocial treatment approach provides a pivotal dimension to practitioner-patient communication that can address the current discourse that exists as barriers to quality communication.

Etienne Wenger's Communities of Practice model provides a step by step method of translating theory into practice for organizations which will be discussed further in the thesis (Wenger et al., 2002). The practitioner-patient encounter is nested within organizational influences. When considering means by which to improve the nature of the practitioner-patient encounters, the extrinsic factors must be considered. The common thread amongst the theoretical frameworks of Fairclough, Engel and Wenger is the inclusion of both intrinsic and extrinsic factors that are highly influential on the interaction between the practitioner and patient which is mediated through communication. These models are humanistically grounded and holistic in nature while they consider the biological, sociological and psychological realms of the human condition, the practitioner-patient communication and the environment within which the practitioner-patient interaction occurs. More specifically, intrinsic factors relate to

cognitive processes associated with cultural and gender disparities. Exploring these factors exposes the underlying nature of attitudes, stereotypes and prejudices that silently influence communication. Extrinsic factors include environmental influences such as the workplace culture, climate and power dynamics.

The means by which these theoretical resources gained from researchers and theorists may enter the medical arena is by way of policy, education and practice. In order for patients to receive humanistic treatment and care, theories need to translate from research to practice. This will require specific education and training for all medical professionals. As Howard Gardner(year?), theorist of the multiple intelligences ideology, states in his book, *Five Minds for the Future* in relation to cultivating cognitive abilities, "As I consider educational, political, and managerial systems that might actually nurture these five kinds of minds, I gain confidence that our positive human potentials can be cultivated...In any event the survival and thriving of our species will depend on our nurturing of potentials that are distinctly human"(p. #). Ultimately, health care is about humans providing services to humans, therefore human interaction is at the heart of the matter. Gardner speaks of cultivating cognitive abilities that benefit society which parallels the goals of this particular study relating to improving the delivery of human care through effective communication.

The integration of a humanistic approach into medicine will require a formal transformative process that encompasses both policy and education in order to have a positive effect on practice. However, the knowledge that is reflected in theory and empirical evidence regarding barriers to effective communication are not mirrored in policy or practice. The recent interest in this topic has been prompted by the high

incidence of chronic pain and health care costs. Scholars postulate that the explanations for poor care outcomes are perpetuated by the incongruent nature of policy and practice because of a lack of medical humanities subjects in the curriculum that is used to train medical practitioners.

Inherent in this problem is a debate related to the current government focus on a managed care approach where the main objective relates to monetary elements of the process as opposed to the quality of service rendered. This is one of two major debates where there are supporters of a managed care system (government funded) which is driven by monetary goals versus a best practice system that is in the best interest of the patient. This rivalry is evident in the hospital environment that tends to "herd cattle". The other debate relates to practice as opposed to the general management of the whole system. In this scenario, the biomedical or science focused approach to care is the managed care side of the dispute whereas the holistic biopsychosocial treatment approach or the patient focus side of the debate carries the necessity to go beyond the scientific aspects of illness by considering other influential factors of the human experience. However, the notion that needs to be recognized by educational and health care leaders is that improved quality of care could diminish the level of inaccuracy that is being sacrificed in the managed care environment, which in turn, could decrease the compounded, costly problems that are being encountered today.

The consideration of the barriers to effective communication are essential in order to understand the inherent barriers that impede change and are perspectives held by policy makers themselves. The focus of this study was on the actual dynamics of the medical encounter itself which is fundamentally at the heart of the medical system as a

whole. As Coles (1989) has argued, " what is truly missing in medicine is the human experience and moral teaching and learning as a lifelong process. It is about physicians needing to teach their patients what they know and have learned from others and continue to learn from their patients" (p.125). As depicted in his book, Coles utilizes literary compositions to convey complex moral teaching to his medical students in order to convey the humanistic nature of medical encounters. In essence, teaching and learning by human experience and observation is key to successful provider-patient interactions and must be reflected in the policy and practice in order to achieve better medical system outcomes.

The Significance of the Study

In an attempt to explain the poor outcomes of the health care system, the human experience is being examined in terms of the interaction that occurs during medical visits. It is interesting to note that although technological and pharmacological advances have been made over the past decades, the same challenges exist today that are related to humanities. Studies have generated knowledge regarding practitioner-patient interactions over the past decade (Arber, et al., 2006; Carey, et al., 2003; Dearborn, et al., 2006; Fochen, 2006; Frankel & Quill, 2005; Gorter & Freeman, 2005; Innes, et al. ,2006; Ibrahim, et al., 2002; Ledlow, et al., 2003; Street, 2002; Sivesind, et al., 2008; Zeiltzer, 2007).

The gap which exists between theory and practice is further widened by barriers that are disruptive to effective communication. In part, these barriers relate directly to growing cultural diversity, gender and power disparity issues in relation to practitioner-patient encounters. Attitudes, beliefs, values and perceptions that are associated with

these factors underlie the interactions that occur during medical encounters. There are aspects of each factor that have a negative influence on the quality of communication, subsequently decreasing the degree of efficiency and effectiveness of clinical interactions. Research has demonstrated that this phenomenon is occurring both nationally and cross culturally. This suggests that there are elements of the human experience in medical encounters that converge over different worldviews and various paradigms. An etiological view will be taken in this study as it considers all aspects of the medical encounter in the context of the big picture due to the multidimensional nature of the encounter.

In light of the nature of the medical culture, that is the human side that is inherent in all players, is the notion that social disparities such as power differentials, gender and cultural disparities exist and have an impact on the interrelationships thereby impacting the outcomes. Although there is legislation that protects people against discrimination, it still exists below the surface unknowingly to the individual where their judgement is being influenced by stereotypes, cultural beliefs and values. While there is also legislation that governs medical faculties to include humanities as a part of the medical curriculum, it is vague and incapable of meeting the needs in practice. Humanities is a broad term; however, in this study humanities refer to the human factors that relate to and have an effect on communication during medical encounters. Are medical professionals able to overcome these discriminatory beliefs and values? Are they aware of what they are and/or have they received formal education regarding them? According to research that has examined medical education programs, this area of humanities is not emphasized

enough and often exists as a topic that is subsumed within other topics in the curriculum (Frankel & Quill, 2005).

Effectively, this study will inform the players in the medical system regarding the need for the development of policy that will guide a humanities- oriented curriculum in the education of medical practitioners. Raising awareness about these needs will motivate practitioners to re-examine their practices in order to improve patient-practitioner encounters. Also, it will bring to the forefront, the importance of communicative competence among practitioners as well as the importance of quality communication for positive treatment outcomes.

Chapter 2: Literature Review

Overall, it is the practitioner's treatment approach and communication style in addition to perceptions related to demographic variables that affect the patient's level of satisfaction and adherence that leads to a particular treatment outcome. Collectively, these variables are viewed as potential barriers to effective communication. Thus far in research, many associations have been found with specification to a particular aspect of cognitive processing factors but not necessarily to the combination of factors that impact the quality of communication. For example, decreased patient satisfaction is associated with practitioner's utilization of the biomedical treatment approach, decreased gender concordance, decreased cultural proximity and overall decreased quality of communication (Margalit et al., 2004; Street, 2002; Lutfey & Ketcham, 2005, Arber et al. ,2006). There have been a few studies that have found that decreased patient satisfaction is associated with decreased patient adherence. In effect, these factors can be viewed as precursors or barriers of communication effectiveness.

It should also be noted that the success of the biopsychosocial treatment model is mainly based on the satisfaction of the patients, which lends to the idea that patients will adhere better to their treatment regimes in addition to having all factors addressed in the management of their case which will reduce the chance of secondary illness, depression, anxiety, death and suicide. Frankel & Quill (2005) argue that several studies have shown that although applying the biopsychosocial treatment approach in medicine requires more effort on the part of the practitioner, "the attunement to the patient's and the physician's own emotional states yields an efficient framework for care that reduces emotional burden and burnout" (p.414). This in turn would improve the efficiency of medical visits.

Practitioner-Patient Communication in Medical Encounters

What is the cause of the disparities in healthcare? Is it the provider's style or pattern of communication that influences the interaction? Is it the characteristics of the patients that affect the outcomes in the encounter? It seems clear that personal attributes do have an impact on the interaction but what is at the root of these forces? An individual's behaviour is influenced by both intrinsic and extrinsic factors in any given situation. Examining both intrinsic and extrinsic factors as predictors of behaviour can assist in the future development of communication skills training curriculum to help moderate their impact on interrelationships in the medial culture

Optimal communication in the medical culture is crucial for the system as a whole to function both effectively and efficiently. This involves interrelationships amongst the practitioner-patient, the practitioner-practitioner and the practitioner to administrators and governing bodies. Essentially, it is the framework of the medical culture that influences

the manner in which the operations within it are carried out on a day to day basis. The medical culture is framed by politics, education and belief systems. For this reason, it is logical to consider education when attempting to address issues related to the quality of communication during medical encounters.

Researchers have begun to move away from the question of whether or not personal attributes have an impact on communication and have now begun asking questions related to why these attributes exist during encounters through the investigation of cognitive processing of practitioners and patients during medical encounters (Street, 2002; Sivesind et al., 2008; Rosenstein, 2002). This involves consideration of practitioner resources such as communication style, skill level, perceptions about communication and self efficacy. According to Street (2002), using an ecological model suggests that one is predisposed to communicating in a certain way. In the ecological model, the provider has two sources of adaptive behaviours depending on a situation which include cognitive-affective factors and the patients' communicative actions. The cognitive-affective factors include strategies (goals and purpose), attributional (stereotyping and impression) and relational components (trust and familiarity) whereas the partners' communication actions include coordination, cooperation, partner building and partner participation. According to Street (2002), it is a reciprocity of these groups of factors that create the dynamics of the communication in addition to predisposing influences and cognitive-affective mediators. Predisposing influences include communication style, self-concepts (attitudes, beliefs, personality) and linguistic resources. Cognitive-affective mediators include goals perception of the partner, perception of relationship, communicative strategies and emotional state. In addition to these factors are the style and patterns of

communication that relate to the predisposing influences. Examples of communication styles include assertive, friendly, reserved, expressive and patterns of communication that include narrowly biomedical, psychosocial or biopsychosocial. Street (2007) concludes that based on the analysis of 55 articles, there is an interplay between style, perceptions and adaptation. Moreover, the evidence shows that female communication styles is more reflective of patient centered approach and that patients are most satisfied with it. Consequently, Street (2007) suggests theory building and communication skills training as a means of improving practitioner-patient communication.

Another study that focused on differences in perceptions on the quality of communication between nurses and patients was conducted by Ledlow, O'Hair and Moore (2003). The setting was a nurse call center that serves as a critical liaison between potential patients and physicians. The Communication Audit survey instrument (Goldhaber & Rodgers, 1979) was administered to 242 patients and 63 physicians regarding the quality of communication provided by the call centre with respect to timeliness, accuracy and usefulness. The findings indicated higher levels of self efficacy had a positive effect on patient perceptions of timeliness, accuracy, usefulness, and participation in self-care classes. This suggests that the reaction of the patients is due to their personal feelings of control and confidence in their health. Provider's perceptions differed on the basis of training, specialty and experience leading Ledlow et al. to conclude that the supply side, being the providers of medical care, has been ignored concerning monitoring and assessment of its practices. These researchers believe that rethinking the delivery system in order to decrease service risk and financial risk is needed through the practitioner education and empowerment of patients as well as

through the enactment of new policies. It is their view that fewer services will be required and demanded if the quality of patient care services improves. This improvement can be achieved through medical education.

Few studies have considered physician's explanations as a measurable characteristic of the medical encounter. When considering the service side, characteristics related to the level of skill of the provider is important. Hafihara et al. (2006) conducted a study utilizing a randomly selected population of 126 physicians and 950 patients in Japan. The findings indicated that patient gender and physician experience were significant predictors of concordance between physician and patient evaluation of the level of quality of the physician's explanation. Overall, gender concordance was at 48.9%, patient evaluation was higher than physician's by 36 percent. In an attempt to determine the provider's perception of difficulty related to patient communication, Sivesind et al. (2008) conducted a study with 350 nurses using a survey that was designed to measure challenges that nurses encounter in actual clinical situations framed by a "learner-centered" model. The researchers found that nurses rated themselves as being least skilled at requests for euthanasia, the economic impact of cancer on the patient, confronting a colleague about undesirable behaviour, intervening with families in denial, addressing sexual issues, and managing patients who demand too much time (Sivesind et al., 2008). The researchers recommended that advanced communication skills training be provided to nurses in the future.

Overall, the mass implementation of this best practice biopsychosocial treatment model in theory should reduce health care costs dramatically by improving clinical outcomes as its' use improves the quality of communication during medical encounters.

There are a large number of studies that suggest it has positive effects on the practitioner-patient interaction and the satisfaction level of the patient. Reasons for the inconsistent and lack of widespread use of this model directly relates to a lack of knowledge regarding effective communication of stakeholders and the disconnect between theory and practice. Changes to policy related to health and education are necessary to facilitate the change as they are reciprocal and directly related to each other. Both have a strong impact on the organizational environment in which the medical encounters occur. According to Suchman, (2005), " education is truly not enough to change clinical practice....the clinical behaviour of individual practitioners is profoundly influenced by the organizational environment in which they work" (p.451). This model will benefit operations at the macro-level, meso-level and micro-levels of the medical system. Potential benefits to all levels would include the following: decreased health care costs at the macro-level, decreased adverse patient events and increased efficiency of operations at the meso-level and improved quality of practitioner-patient encounters and treatment outcomes. Etienne Wenger's Communities of Practice model speaks to the need to empower organizations with knowledge in order to bridge the gap between theory and practice. As Wenger(2002) states, the model "provides concrete organizational infrastructure for realizing the dream of a learning organization", in addition to providing a "practical way to frame the task of managing knowledge" (p.11). Wenger, also emphasizes the value of knowledge where "knowledge involves the head, the heart and the hand; inquiry, interactions, and craft. Like a community, it involves identity, relationships, competence; meaningfulness, belonging, and action. A community of practice matches that complexity" (p.45).

Cultural Differences and Communication in Medical Encounters

Currently, cultural and racial diversity is a growing concern to medical professionals in the challenges of meeting the needs of patients. Patients communicate differently in terms of language and some have a religious following that demands the medical encounter to converge with their beliefs. For example, female Muslim patients must be treated by a female practitioner as per their religious beliefs. According to Simpson and Carter, (2008), there are two Islamic concepts that need to be clearly understood by practitioners being "aora" and "khulwah". The term "aora" relates to medical encounters as, " aora is defined as the specific parts of a woman's body that cannot be seen by someone of the opposite sex who is not directly related to the woman and who could possibly marry her. For women, men cannot see them except for their hands and face, and women cannot see other women from their navel to their knees" (Simpson & Carter, 2008, p.20). The second term "Khulwah is the Islamic ruling that men and women who could possibly marry cannot be alone together in a private setting (closed room) without a chaperone" (p.20). As a result, providers may experience uncertainty related to diagnosis and prognosis due to these cultural differences in addition to linguistic differences. Translators provide assistance but often when language is translated some of the meaning is lost. Non verbal cues become more heavily relied upon by both the patient and the practitioner that can lead to important information being misinterpreted. Yet, many practitioners do not receive the requisite training in their education to deal with such challenges.

Cultural issues related to stereotyping, prejudice, cultural proximity and linguistic differences have the potential to impede the efficiency of communication. Communication can be in the form of verbal and nonverbal language. Studies have shown that although the person is unaware of actions suggestive of stereotype and prejudice, the observer is fully aware and negatively affected by it. According to Lutfey & Ketcham (2003,) "stereotyping refers to the process by which people use social categories as they acquire, process, and recall information about others". In addition, these authors define prejudice as a "specific type of stereotype- those with negative attitude or affect" (p. 1812). Lutfey and Ketcham suggest that stereotype and prejudice present in medical encounters lead to uncertainty for the provider and patient which interrupts the flow of communication. According to Lutfey and Ketcham uncertainty refers to " the problems people sometimes encounter in the process of cognitively processing their social worlds; uncertainty occurs when social actors have difficulty cueing an appropriate or accurate stereotype, or when they use stereotypes unreliably" (p. 1812). Uncertainty on behalf of the provider is a barrier to effective communication during medical encounters which in turn, has a negative impact on the quality of patient care.

Barriers to communication have an impact on the quality of communication that transcends to the treatment outcomes, one of which is patient adherence. Lutfey and Ketcham(2003) conducted a telephone survey study that examined the interaction between race and discordance in doctor-patient dyads in an attempt to demonstrate differences in attitudes about patient adherence. Patient adherence refers to the degree to which a patient follows their prescribed treatment. The sample of 156 patients attended

an endocrine clinic for treatment of diabetes. The sample represented 94% of all patients that visited the clinic over 3 months. One group was made up of predominately educated Whites that had higher education and medical insurance coverage while the second group consisted of predominately Black patients that had lower levels of education and were underinsured. Statistically, providers assessed adherence among the Black patients 17% lower than white patients and the difference between the provider assessment and the black self assessment was 67% higher than that of whites. In effect, the providers were not systemically above or below in the rating of adherence but systemically far away from the black patient ratings (Lutfey & Ketcham, 2005). The authors conclude that these findings reflect "theory complexity extremity effect, where people tend to have increased exaggerated evaluation of others belonging to a group to whom they have had little exposure and have less cognitive understandings" (as cited in Lutfey & Ketchan, 2005, p. 1813). This raises the question as to whether or not health disparities related to race are related to the unknowingness of the provider of the patients needs or is there any underlying stereotype or prejudice that affects clinical judgement?

Gender Differences and Communication in Medical Encounters

Researchers have identified gender issues related to treatment decisions, patient provider preferences and differences in styles of communication. Arber et al. (2006) conducted a factorial experiment that examined the importance of the decision making process of primary health care providers and how personal attributes influenced the management of the patient case. Arber et al found that socially biased referral decisions were made due to inequities framework. This situation is referred to by the authors as the "gate keeper phenomenon", where the primary care physician has the power to control

referrals to specialists, order tests and request specific treatment and non-invasive/invasive surgical procedures (Arber et al., 2006, p. 104). In that study, 256 general practitioners were randomly selected from Health Authority lists for two contrasting UK areas and the US family practitioners were identified through the Massachusetts Medical Society. Video vignettes were recorded using professional actors to present with standardized coronary heart disease symptoms and depression. The physicians were asked to view the videos and to give their diagnostic and management actions recommendations. There was a significant difference found in the case of gender and age, not for race and class. The physicians asked more questions to male coronary heart disease patients and provided a more extensive physical examine and ordered more tests than for females and older adults. This study demonstrated the potential occurrence of gendered ageism which, according to Arber et al., has recently been recognized by the UK government as they have initiated a National Service Framework (NSF) for Older People where the target is aimed at "rooting out age discrimination" (as cited in Arber et al., 2006, p.104).

Gender concordance plays an important role in health care encounters. Schmittdiel, et al. (2000) conducted a study related to gender concordance with a random sample of 10,205 HMO members (male and female dyads). The researchers collected data using the Medical Outcome Survey. There were two experimental groups, one was assigned a physician and the other group of patients had the opportunity to select a physician. Overall findings showed that female patients that chose female physicians were the least satisfied. Male patients that had female physicians were the most satisfied (female physicians showed more nonverbal signs with males) and female patients were

more likely to want to choose their physician. The patients that chose their physician were more satisfied than the assigned group and patients that chose a physician of the opposite gender were more satisfied. Interestingly, the assigned group did not show the same effect. The researchers in this case proposed that the difference must be related to the expectations of the patients about the physician's qualities.

Gender differences exist at the beginning stages of a practitioners' medical journey with respect to their medical education program and career selection. This may be a source of frustration and struggle for females in medical practice that filters through to their daily interactions with their colleagues and subsequently to their demeanor and communication with patients. The environment within which the health practitioners practice has a direct impact on their cognition during patient encounters. While searching for reasons in an attempt to explain why there are predominately more males in neurosurgery, Woodrow, et al. (2006) were lead to consider both curriculum and sociocultural aspects of the environment from which the female practitioners originated. According to the authors, female employment is on the rise in general and in medicine where 50% of the United States and Canada workforces are women. With particular reference to medicine, approximately half are female but virtually few enter specialist practice (predominately primary care givers, nurses, family practitioners, obstetrics/gynaecology) (Woodrow et al, 2006). Female neurosurgeons included 312 out of 5288 and only 13% of all surgeons in the United States . According to the literature, women naturally possess a patient centered approach to care that is of benefit to all involved in the process. In addition, if the reason for the low enrolment is related to the societal misconception that it is a male dominated field, this should be addressed through

educational support for females in science and medicine. As the author attempts to explain this trend, the glass ceiling is defined. "The glass ceiling" is a metaphor that is mentioned as a construct that addresses gender inequalities (Woodrow et al., 2006, p.750). "As the image suggests, it refers to an invisible, yet impenetrable barrier that keeps women from rising to the upper echelons of their profession, regardless of their qualifications or achievements" (Woodrow et al, 2006, p.750). Overall there is very limited research regarding the reasons for low enrolment of women in specialty medicine.

This is a difficult scenario as doctors in the operating arena are described as demonstrating very masculine traits such as extroversion, competitiveness and impersonal behaviour which has been termed the "surgical personality" in literature (Thomas as cited in Woodrow et al. ,2006, p.751). Levinson, (1991) considered mentorship as a means of assisting women to succeed and that gender should be considered as an important characteristic of communication styles where women include more psychological and personal interest as opposed to a male approach which is mainly professional guidance which is what women seem to need.

What can be learned from differences in gender communication styles? Levinson (1991) concluded that women possess characteristics that could benefit the medical culture as whole. In addition, that women need mentorship support to assist with barriers that currently exist in the system due to deeply rooted sociocultural beliefs that are hard to change. The literature has stated boldly that women possess communication attributes that are connected to superb patient care and management in comparison to males. The medical culture is in need of improved care processes which encompass improved communication and collaboration skills.

Medical professionals not only need to be educated about the biopsychosocial treatment model and how to utilize it effectively during case management but to also be able to recognize that there are other barriers that influence communication in order to fully understand the dynamics of the encounter. In the following study, Roter and Hall (2004) convey the importance of political changes that need to occur in order for the biopsychosocial treatment approach to be mandatory in treatment and education. They also stress the importance of psychology in medical training and the increased need for lifestyle counselling in relation to lifestyle illnesses that are the main cause of death. This study involved an in-depth review of twenty six studies related to gender and communication. According to Roter and Hall, (2004), the several key communication categories which must be included during a medical encounter include; 1) data gathering from the patient; 2) patient education and counselling; 3) partnership building and; 4) emotionally responsive communication (Roter et al 2004). Overall, the findings of this study show that female related communication characteristics such as more attention to psychosocial issues, positive talk, counselling, greater use of emotional talk and active listening create a comfort level for the patients as well as make for longer visits. Logically, it would seem that patients would tend to seek female doctors, however the research is inconclusive. Although patients prefer the style of the female, they may feel that the male is more competent. This may be a cultural belief that men are more powerful and hold higher positions because they are better than females. Interestingly, the authors found two studies that deviated from the trend as discussed above. The main difference was the types of physicians in the study. Doctors of obstetrics and gynaecology showed the valued female characteristics as opposed to other male doctors.

Roter & Hall (2004) believe that this is related to the competition that exists for business as there are more females in this profession and obviously the patients are all female. This finding strongly suggests that medical professionals can modify their behaviour and can respond successfully to training. As stated by the authors, there needs to be an official change to the current communication practice in the medical culture on a global level and " the promotion of patient-centered medicine is key to the nation's future quality-of-care agenda and to the advance of medicine, both as healing art and as science" (Roter & Hall, 2004, p.513). Are patients more likely to adhere to treatment if they are more satisfied with the quality of communication during encounters? Do patients view males as more competent due to stereotypes in society? Is satisfaction related to their perception of competence of the practitioner or their perception of how the illness is affecting their life? Which is a stronger influence, the doctor or a patient's social values? Can a medical practitioner successfully overcome barriers to communication and yield a positive treatment outcome?

Gender-related power dynamics seem to be present in all contexts of society. Feminist scholars' stance is that "gender is a central organizing principle of society and intimate and familial relationships" (Haddock & Lyness, 2002, p.6). Additionally, the researchers propose that traditional models of family therapy ignore the construct of gender, and therefore gender-based power differentials between women and men (Haddock & Lyness, 2002, p.6). As in the doctor-nurse, doctor-patient interactions, gender and power influence the communication strategies between the therapist and the clients. Feminist theorists believe that the central goal of therapy is the empowerment of clients to resist traditional gender expectations and messages (Haddock & Lyness, 2002).

Existing research has revealed that the gender of the therapist influences the conversational style when treating females as opposed to males. According to Kimble & Musgrove, (as cited in Haddock & Lyness 2000) "men tend to talk more than women, louder than women, and before women in conversations"(p.7). Also, Haddock & Lyness (2002) "found that family therapists interrupted female clients three times more often than male clients" (Werner-Wilson as cited in Haddock & Lyness, 2002, p. 7). Although this study is not focusing on the effects on the treatment outcome, it should be noted that according to the author there was only one study that looked at this by Werner-Wilson which found that male patients felt more bonded with the therapist as opposed to the female patients. In addition, "feminists have argued that the concept of circularity - one of the central concepts of systems theory - assumes that females and males are equally powerful, and therefore equally responsible for creating and maintaining problematic interactions" (Goodrich, Rampage, Ellman & Halstead as cited in Haddock Lyness, 2002, p. 10). They, however ,assert that this equality does not exist in society. The findings of this study suggest that therapists should resist socialization messages and avoid "gender-boxing" patients (Haddock & Lyness, 2002). In addition they should treat female patients more respectfully as well as empowering them in an attempt to create improved communication. This approach is aligned with patient outcomes in the study by Werner-Wilson that found male patients felt closer to the therapist using a feminist approach.

Power Disparities in Medical Encounters

Situational factors and the environment play a strong role in communication dynamics as aspects of these factors frame the context of the interaction. Given the

obvious difficulties inherent in communication during medical encounters, it is logical to assume that the combination of a challenging environment and poor communication is destined for complications.

Fairclough's Critical Discourse analysis (1997) proposes that communication is a linguistic exchange of words and body language that is tied to sociological and psychological aspects of the persons involved. Consideration of Fairclough's Critical Discourse Analysis lends to the notion that the perpetuation of power occurs by the manner in which participants exert themselves and process the linguistic exchange. In addition as Fairclough states it "can be used in research if it can produce insight into the way discourse reproduces (or resists) social and political inequality, power abuse or domination"(p. #). Fairclough(2008), defines it as,

> ... a theoretical claim that discourse is an element of social life which is dialectically interconnected with other elements and may have constructive and transformative effects on other elements. It also makes the claim that discourse has in many ways become a more salient and potent element of social life in the contemporary work and that more general processes of current social change often seems to be initiated and driven by changes in discourse (p.2).

Based on Fairclough's explanation of the impact of linguistic exchange, communication should be viewed as a powerful interactive tool that is highly influential in medical encounters. How can issues related to power interfere with linguistic exchange during medical encounters? Why should it be considered as a barrier to effective communication? An explanation can be found when considering the impact of

harassment during medical encounters and the negative impact that a victimized person has coming into a linguistic exchange.

Harassment is universal as it occurs on all status levels and is worldwide. Criminology has devised definitions of terms and developed theories to explain the behaviours of individuals relative to harassment. The two major conceptual approaches that harassment is a component of are power differentials approach and routine activities approach. The power differentials approach is present in the routine activities approach as a contributing factor (Parish & Laumann , 2006). Power differentials origins is defined as "whether stemming from societal norms, organizational hierarchies, or interpersonal characteristics, asymmetries in both formal and informal power increase the likelihood of harassment" (Parish & Laumann, 2006, p. 412.). The Chinese Health and Family Life survey was administered in this study to 3,821 nationally representative sample of participants by Parish et al., (2006). The results of the study indicated that the prevalence of harassment was comparable to western culture. Harassment was experienced more often by a stranger or a peer rather than a supervisor. The findings were in line with both of the power differentials approaches vulnerable victim hypothesis and transitional societies. Overall, the results fit the routine activities approach more consistently. What does this mean for the medical culture? The dynamics of gender,, power and harassment in this example which is prevalent in general society can be clearly seen in the literature concerning the medical culture. It is evident that there are inbred beliefs concerning gender that individuals carry with them into environments and allows them to influence their behaviours. Education about the detrimental effects of deviant behaviours in this case, power and gender-related issues, is essential in all realms of

society. Overall, this study found that gender was the main influential factor of harassment as opposed to status, specifically termed theory routine activities approach.

Subject position theory is another perspective used to explain power disparities. Sundin-Huard (2001) reviews the origin of subject position theory as it relates to approaches of role theory in an attempt to explain the impact of this theory on power dynamics and collaboration in the medical culture. Sundin-Huard define role theory as a "key concept in sociological theory that consisted of two rather different approaches: a social anthropological approach – focusing on the clusters of normative rights and obligations of the roles, for example Talcott-Parson's account of the sick role; or alternatively a social-psychological approach focused on the active processes in taking, making and playing at roles" (Marshall as cited in Sundin-Huard, 2001, p. 377). The author feels that none of these theories are as "useful as subject positions theory in providing both consideration of the power dynamics inherent in any interaction, and explanation of the fluidity of agency and identity characteristic of the human condition" (Sundin-Huard, 2001, p.377). According to Sundin-Huard, subject position theory is defined by Butler (1993,), as a "postmodern theory which draws on Lacanian psychoanalytic theory and feminist theory to offer an explanation of the individual's ability to occupy and move between a variety of identities, or subject positions, within an interaction, depending upon the power dynamics and context of the exchange"(p.377). The purpose of Sundin-Huard's study was to examine the impact of power dynamics related to subject position theory in nursing interactions. The author had interviewed 10 critical care nurses for an honours dissertation in an attempt to "illuminate how moral distress is experienced and how this is related to burnout" (Sundin-Huard, p.378). The

results of the honours dissertation study demonstrated a relationship between lack of power in situations and the stress that resulted. The author's study utilized one of the nurse interviews as a vignette case study. As the vignette unveils, the author examines and interprets the theoretical basis of the phenomenon with reference to subject position theory. For example, Britt's story clearly demonstrated that Britt's nursing role was undermined by a doctor whom had consequently neglected a patient's pain control measures. Due to the fact that Britt decided to challenge her "good nurse" role she approached the doctor, he in turn ridiculed her in front of her colleagues. In addition, when Britt attempted to gain support from her coworkers, they shunned her as they did not want to appear to the doctor to be collaborating with her as they too would receive the same treatment for challenging the subject position 'good nurse'. As defined by Sundin-Huard, (2001,), "the 'good nurse' nurtures, supports, listens, helps and is obedient. Contemporary nurses, however, are educated to think critically and care holistically. This preparation increasingly suggests subject positions that require them to challenge doctors' decisions" (p.378).

The overall findings of the study relate to power dynamics in nurse interactions that result in negative effects on professional well-being. The author concludes:

> ...subject position theory can facilitate the interpretation of the interactions between health professionals in terms of the power dynamics influencing those interactions. In addition, the individual can move through a repertoire of possible subject positions during an interaction, how that movement is dependent upon the power dynamics at play and how the enactment of the chosen subject position

only serves to reinforce the social structure first influencing the choice". (Sundin-Huard, p.381)

The subject position theory takes into account the status of the individual in relation to the manner in which power associated with that position is used. It is also of the notion that individuals adjust the power that is executed in accordance with the position that is held in any given circumstance. Subject position theory seems to include the relevant components of earlier theories but also considers the transformative process when an individual changes roles.

The operating theatre mirrors what has been termed as the "doctor nurse game" for decades with an interesting twist. The extremely stressful environment due to the precise care needed to be taken by a physician to perform surgery and other staff to be certain there are no errors made heightens the volatility of the situation and magnifies the power dynamics that exist. The term "emotional labour" was alluded by Hochschild's work on stewardesses that showed "how emotion work (like other forms of labour) is commodified by the airline and is part of the product being sold" (Timmons, 2004, p.85). This study aims to analyze the skill of the operating theatre nurses and education.
The study was conducted as a field study with observations in 5 hospitals in the UK in addition to follow up interviews with the theatre nurses, anaesthetic and recovery staff and operating department practitioners. The theatre nurses were majority female and the operating department practitioners were all males. The findings of the study focused on "the hostess role" as a main theme which was the responsibility of the nurses to look after the well-being of the doctors. This was to be accomplished by "keeping surgeons happy" and "not upsetting surgeons" (Timmons, 2004, p.88). The sentimental order that was

maintained by the nurses was often disrupted by the surgeons who did not re-establish it but relied on the nurses to do so. The findings of the study also suggest that emotional labour was inherent in the doctor-nurse relationship. This indicates a strong gender role existence in the servant-like functions of the theatre nurses. This notion is supported by comments of the operating department practitioners (all male), "We are not treated like them (nurses) by the surgeons, and we would not tolerate it if we were" (Timmons, 2004, p.88). Other studies have shown that performing emotional labour is exhausting (Goffman & Hochchild). The author believes that this doctor-nurse servant-like relationship in the operating room may pose a barrier to the more advanced model in healthcare that is currently emerging and developing. As with the continued difficulties with nurse retention due to poor communication with doctors, the rising model is empowering to the nurses and may possibly release them from the oppression and submission that they continue to endure with detrimental effects on their personal health and job performance. This new improved model is characterized by a multidisciplinary approach that is attempting to address all of what was detrimental about healthcare in the past in order to improve patient care. Education and awareness concerning gender and power is essential for all involved in healthcare. If the system is to grow and develop into a force that is going to produce the best treatment available to patients, changes will need to occur by providing an empowering productive environment for the professionals in order to maximize their healing capabilities.

Over the past decade there has been a shift from paternalism to egalitarianism in physician styles of care. According to Ong, de Haes, Hoos & Lammes (as cited in Fochsen et al., 2006, p.1236), paternalism "legitimized doctor's right to exert power

over their patients, which is now moving toward egalitarianism which emphasizes patients' rights and shared decision making". Research has clearly started to show that the power disparities that exist in doctor patient relationships are a counterproductive force that does not provide the patient with the best outcomes. In addition, gender further influences this dynamic in a negative fashion. Prior research has shown that more specific gender related characteristics of the interaction which include the doctors' style of approach and differences in perceptions and beliefs of both the doctor and the patient create a biased treatment. Females tend to use a more patient-centered care approach that encourages communication with the patient by way of active listening, eye contact, longer visits, rapport building and emotional talk (Brink-Muinen et al., 2003, Roter, Hall, & Aoki, 2002). Researchers Fochsen et al. (2006) explored "healthcare providers' experiences and perceptions of their encounters with male and female patients in a rural district in India with special reference to TB care, and to discuss implications for TB control" (p.1238). Past research on this topic indicated that "the doctor-patient relationship in TB care has been characterized by mistrust and poor communication, and male doctors, in particular, tend to consider their encounters with female patients challenging (Johansson & Winkvist, 2002). Interviews were conducted with 22 health care providers, 17 men and 5 women. Power imbalance theme with two categories emerged from the data:

> The first category, a relationship dominated by the doctor, describes how the medical encounter is dominated by doctors' knowledge and expertise. In these encounters, patients are perceived as ignorant and incapable of understanding the information that is provided by doctors. Gender is identified here as a factor that

> influences the doctors; dominance. The second category, a relationship determined by consumerism, shows a shift of power from doctors to patients in a context in which market forces enter in the medical encounter. (Fochsen et al., (2006, p.1241)

A quote from a male doctor describing his perception of the encounter further supports this: "We don't have sort of a social linkage, we don't have a relationship, they are very, very different, that's the big problem, that's what I feel, it happens to the majority of doctors, who are coming from a very different strata. We are very different from them, that's a big obstacle between the doctors and the patients" (Fochsen et al., 2006, p.1241). In cases where the doctor and patient are both male, the power imbalance is not as evident, especially when consumerism is the objective of the doctor. Consumerism tends to lead the doctor to act in a more accommodating fashion at times against their views to satisfy the patient as the doctor's livelihood depends on a good reputation. The notion that the doctors were able to switch their approach suggests that it is flexible and can change. The doctors in this study concluded that they felt that their medical training did not prepare them for interactions with patients but rather focused on the sciences. It should also be noted that the doctors' choice of approach was influenced by gender, power, societal beliefs about women and the market. According to Fochsen et al., physicians adjust their approach, more specifically in relation to gender (level of domineering behaviour), toward female patients in addition to accommodating male patient requests that appear to be "shopping" for a doctor. Therefore, sociocultural and situational factors seem to influence physicians' treatment and the care that is received by patients. For example, the physician is more domineering when interacting with female

patients which is reflective of the manner in which women are treated as subservient to men in India. However, in a case where it is a male patient, the physician is more inclined to feel they need to act more gender neutral to please the patient in hopes that they will retain them as their family physician. Obviously, the physician knows that the type of demeanour he has with the male patient is more pleasing, thereby more productive.

There are limited studies that have been conducted in Canada regarding communication in medical encounters. The studies to date that have been conducted are mainly in the United States and offer insight with respect to the dynamics of communication but are limited in the perspective of the impact the quality of communication during medical encounter has on patient satisfaction especially, patient adherence and patient progress and recovery.

Poor Communication and Adverse Patient Events

There are different factors that affect the communication between practitioners, gender and power being the most influential. According to Rosenstein and O'Daniel (2005), poor doctor/nurse relationships have been proven to be detrimental to patients due to resultant adverse effects on treatment and care. Their study attempted to gain perspectives of practitioners pertaining to "disruptive behaviour of nurses, the influence of gender on the tendency to exhibit disruptive behaviour, and the perceived impact of disruptive behaviour on psychological and behavioural variables and clinical outcomes" (Rosenstein & O'Daniel, 2005, p.61). The author examines past research to establish a foundation for the current study in the following examples. As cited in Rosenstein and O'Daniel, (2005, p. 61), according to a 2000 report conducted by Brigham, along with a

Women's Hospital and the Harvard School of Public Health, 15,000 medical records from 28 hospitals were examined. It was concluded that "adverse events occurred in 2.9% of hospitals" which demonstrates that human factors have a strong influence on clinical outcomes. There is little research that pertains to the toll poor communications takes on the practitioners themselves with respect to the impact it has on them psychologically and behaviourally. The literature does however state that poor communication between doctor/nurse is correlated to poor job satisfaction, stress and low retention (Rosenstein, 2005). The responses of 1,091 participants were considered. The findings indicated that "disruptive behaviour had a significant negative impact on levels of stress, frustration, and concentration and on team collaboration, information transfer, communication and nurse-physician relationship" (Rosenstein & O'Daniel, 2005). The importance of considering the relationships of nurse-physician relates to the transfer of the stress and dissatisfaction of the nurses and physicians to the patients. With respect to gender and power influence, 57% of respondents perceived that more male doctors had the tendency to display disruptive behaviour, 2% of respondents perceived that more female doctors had the tendency to display disruptive behaviour and 41% felt that gender did not matter (Rosenstein & O'Daniel, 2005). An example is given referring to "Dr. X" (female) is rude and demeaning to all of her colleagues resulting in a negative impact on patient care and morale. According to the findings of this study, it appears that status related to power seems to be a more dominant influence than gender. The author suggests that organizations use education and leadership support to raise awareness about the barriers and negative influences that exist with the medical encounters. It is important to note that communication between medical colleagues does have an indirect impact on

practitioner patient encounters. Health practitioners that experience stress related to peer relations may transfer their frustrations to the patients.

The Joint Commission on Accreditation of Healthcare Organizations has estimated that 126,000 nursing positions are vacant and that more nurses will be leaving than entering it, that the medical culture needs serious change in order to meet the needs of the staff and the patients (Rosenstein & O'Daniel, 2005). This was a fairly large study that included 50 hospitals with more than 1500 surveys being assessed. This should be a "red flag" for governing bodies of the medical culture and educators as these are the two major entities that can change the current conditions with respect to communication breakdown in the medical culture. It is evident that power dynamics are largely disruptive to communication and unproductive to the outcome of the quality of care that is received by patients.

Societal norms and beliefs have a strong impact on the expectation of practitioner and patients during medical encounters. Trentham & Larwood (2001) examined the linkage of social expectations concerning power status and gender with individual's attributions of responsibility relative to causing and resolving disagreements during encounters (Trentham & Larwood, 2001). The authors use a lens of attribution theory as it applies to intimate relationship conflict. The authors also considered the influence of power status and gender on how people resolve disagreements, for example by adhering to their own wishes or by deferring to their partner's wishes (Trentham & Larwood, 2001). Prior research has found that responsibility attributions are present in a conflict when one person does not satisfy the expectations of the other, then the person that is

believed to have not met the expectations is blamed and the other person's perspective dominates in the resolution.

Research has also suggested that "expectations concerning power status may include different views of each partner's individual entitlement or of each partner's individual ability and responsibility" (Attridge & Berscheid, 1994; Lerner, 1987; Lindsey 1997; Strong & DeVault, 1989; Heider, 1958; Morley & Stephenson, 1977; Sieber, 1974; Stryker, 1985; Weiner, as cited in Trenthem & Larwood 2001 p. 731). Trenthem & Larwood) tested two hypotheses, one being the JBR (justified benefits/rights hypothesis and AA (ability/accountability hypothesis). Influential forces include gender role expectations and perceptions, power status expectations and perceptions and power gender differentials. Essentially, it is a battle between influencing factors of power (status, type and gender) that determine the outcome while being driven by perceptions and expectations of each person involved in the linguistic exchange. Ultimately, each individual's objective in a scenario is to gain dominance. Depending on which factors are present in the situation will largely affect the outcome, for example, "men's perceptions of greater power within their relationships may influence, or be influenced by their greater use of direct power, such as straightforwardness and assertiveness (Cantor & Bernay, ; Urger & Crawford, as cited in Trentham & Larwood, 2001, p.735). For women, when in a position of greater power, they choose to use indirect means of power and will engage in manipulation, personal rewards and helplessness (Cantor & Bernay, 1992). Overall, for women the difficulty lies in the fact that while " women's roles have changed gender stereotyping that discourages the legitimacy of women with high power status still exists in turn, women may play down their higher status to get others' support,

emphasizing a group effort when problems arise" (Ridgeway as cited in Trentham & Larwood, 2001 p.736). Understanding these power dynamics could be an empowering tool for medical practitioners.

BIOPSYCHOSOCIAL APPROACH: A GROWING SCHOOL OF THOUGHT

The epidemic of chronic pain and the cost of its prevalence to society from both a physical and mental perspective is astronomical. Moreover, chronic pain is often associated with major comorbid psychiatric disorders and emotional suffering (Gatchel et al., 2007). Knowledge regarding wellness benefits has increased significantly during the past decade due to extensive research in health psychology in response to increases of lifestyle related illnesses. By definition,

> Health psychology is devoted to understanding psychological influences on how people stay healthy, why they become ill, and how they respond when they get ill. It focuses on health promotion and maintenance; prevention and treatment of illness; the ideology and correlates of health, illness and dysfunction; and improvement of the health care system and the formulation of health policy (Taylor, 2003).

A significant number of studies have discovered the link between the mind and body in physiological terms (Gatchel, et al., 2007 ; Margalit, 2004). It has been proven scientifically that stress and pain can lead to illness in the physical body. In addition, the study of psychoneuroimmunology specifically depicts the impact of this process on a cellular level. This empirical evidence strengthened the foundation of the biopsychosocial treatment approach.

FACTORS AFFECTING THE QUALITY

George Engel (1977) is credited with being the first to advocate the need for a new approach to the traditional biomedical reductionistic philosophy in medical encounters. The advocacy of the biopsychosocial treatment approach led to the growth of the field of behavioural medicine and health psychology (Gatchel & Baum, 1983). George Engel has urged, "physicians to utilize the biopsychosocial model and that includes psychological issues as well as social phenomena in addition to the biologic data that allows them to better understand the problems with which the patient presents" (As cited in Leigh, 1997, p.11). As the human body is an integrated network of processes, all aspects must be considered to achieve optimal treatment, prevention, maintenance and recovery. Following this perspective, Gatchel et a.l (2007,), make a clear distinction between disease and illness where disease is defined as, "an objective biological event involving the disruption of specific body structures or organ systems caused by either anatomical, pathological, or physiological changes. In contrast, illness refers to a subjective experience or self-attribution that a disease is present(p.582)."
Although the vital importance of this model is rather obvious, realistically speaking, its full benefits are not being gained as will be explained in following paragraphs.

Currently, the best practice model that is depicted in a large number of research studies is the biopsychosocial treatment model. This approach has a strong scientific, empirically relevant theoretical foundation and warrants serious consideration as a core operating framework for medical practice. Engel defines the biopsychosocial treatment model where " the idea of disease as a pathophysiological phenomenon is paired with the idea of illness as a social response to disease; disease and illness are seen as mutually influencing one another both psychologically and physiologically; not simply as

independent properties of mind or body" (as cited in Frankel & Quill, 2005, p. 414). This model differs dramatically from the traditional biomedical approach to treatment in which physicians focus only on the symptoms of the patient without consideration of other highly influential factors of the medical condition such as psychological well being, sociocultural and socioeconomic issues. According to Philgrim (2008), the biopsychosocial treatment model also termed mindful practice and patient-centered care, is a model that " is supported by the acclaimed intellectual resource of general systems theory" (p.1). which was developed by biologists Ludwig von Bertalanffy and Paul Weiss The general systems theory assumes that "the whole system has physical elements, which are both sub-personal (biological) and supra-personal (psychosocial)" (as cited in Philgram, 1999, p.1). The challenge today is that the biopsychosocial treatment model is not being utilized to its full potential. There are limited controls on medicine as a practice and a lack of medical humanities medical curriculum which the best practice model is based upon. The biopsychosocial treatment model's success has been demonstrated in numerous studies.

A review of literature suggests that the relevance of the biopsychosocial treatment approach has been validated and is currently being utilized within disciplines (Arber et al., 2006; Grabsch et al. 2006; Morris, 2004; Gupta, 2007). Additionally, there is evidence that multidisciplinary team approaches are being used within medical niches. However, despite some evidence of collaboration, there is a lack of connectedness to the entire system. The London Upper Limb Clinic in London Ontario is a local example of a multidisciplinary team. Residents of Windsor Ontario must travel to London for complex upper limb care. Although the awareness of the fundamentals of the biopsychosocial

treatment model mostly exists here as a multidisciplinary approach, the overriding issue is that it is being practiced in isolation of the health system as a whole where referrals and wait times are an issue. There is also an inherent chain of command or hierarchy where this process or plan for recovery or treatment can only be initiated by the family doctor. In this scenario, the patient is at the mercy of the doctor and may be subjected to a difficult process depending on potential barriers of a self serving practice for example, power and control issues of the practitioner, limitations of family doctors and lack of specialization. These factors interplay during practitioner-patient encounters and often create barriers to effective communication. As Street (2002) suggests ," Researchers could try to identify those attitudes and beliefs about health care that help explain why socio-demographic characteristics sometimes correlate with communication behaviour" (p. 205). Some medical professionals value the biopsychosocial treatment approach while others are either unaware of its value or, are uninterested. A question that might be asked is, why is there not a more grounded process for communication during medical encounters? Can the process of going to the family doctor be improved upon if a patient is guaranteed to be met with the most efficient, effective assessment and treatment in early stages of illness? In addition, all aspects of the patient's health should be considered with a team of medical professionals trained in this model of care given its documented benefits.

The Biopsychosocial Model and Practitioner-Patient Communication

Research suggests that the biopsychosocial treatment approach is a holistic best practice model that encompasses a pattern of behaviours that optimizes the manner in which providers gather information while communicating with patients with regards to

communication. The biopsychosocial treatment model of care promotes empowerment and reciprocity that fosters partnership building and patient participation which in turn, encourage trust and productive exchange of information during the practitioner-patient encounter. Ultimately, the provider is able to present a more informed diagnosis and prognosis that according to research, results in higher patient satisfaction (Margalit et al., 2004). The essence of the biopsychosocial treatment model is in the skilled detailed observation of the patient in particular areas of concern. Equally important is the self reflective nature of the communication that allows the patient to be engaged in the process while experiencing their own empowerment which is an exceptionally important factor in the healing process. Hoyle Leigh, Professor of Psychiatry , University of California, San Francisco and Fresno VA Medical Center, author of *Biopsychosocial Approaches in Primary Care: State of the Art and Challenges for the 21st Century* describes the biopsychosocial approach in terms of four perspectives that the physician may take to be successful which include: 1) the disease model, where the pathology and symptoms are assessed, 2) the life history model where information regarding life event and the patient's reaction to them, 3) intersubjective differences which is the parallel nature of measurable characteristics of a patient and subsequent behaviours and, 4) motivated behaviours where obsessive behaviours that negatively impact health are examined as the cause of conditions.

To date research has identified health behaviour risk predictors for both the provider and the patient and have mainly used subjective measures to assess the success of the biopsychosocial model and consideration given to humanities in communication. Although patient satisfaction has been the main predictor or measure of treatment

efficacy, researchers are currently discovering ways to assess the objective effectiveness of improved communication including patient adherence and measurable biological, physiological and psychological improvement. To date, patient satisfaction and practitioners' level of confidence seem to be the predominant measures. This is a challenge for researchers as confidentiality of patient information is strictly regulated and difficult to obtain. For the purposes of this study, the examination will preclude in terms of the characteristics of cognitive processes of patients concerning personal attributes, intrinsic and extrinsic factors in relation to the quality of communication and the resultant outcomes for the patients. In order for the biopsychosocial model to be successfully implemented, these barriers need to be reduced as they interrupt the execution of this communication pattern and disrupt concordance, empowerment and reciprocity of the encounter which are all predictors of effective communication. Intrinsic and extrinsic factors that impact the quality of communication and outcomes by provider and patient health behaviours will be examined in the following section.

Justification for medical education related to humanities is reflected in the types of illnesses that are prominent in western culture today. Education is the key to empowering these relationships in effect by addressing the dynamics of medical encounter discourse. The types of illness and disease that are most highly associated with morbidity are related to lifestyle. An individual's lifestyle choices are related to biological, psychological and social aspects of life. Reasonably, it seems necessary to address these areas when considering illness and disease in order to get to the root cause of the problem. Current medical literature suggests that good case management of patients is in isolation and not the majority. The question remains as to what the cause of

the lack of attentiveness of practitioners to humanities in practice?. Have they been educated regarding the importance of humanities in practice? Do they choose a certain treatment approach consciously or unconsciously? The differences in treatment approaches and communication styles have been studies in terms of their effectiveness on patient satisfaction. However, to date research is limited in relation to patient recovery. Research has shown that training in communication style can have a positive affect on patient satisfaction (Frankel & Quill, 2005). Since attitudes influence behaviour, chances are that patients will adhere to treatment better and there will be improved treatment outcomes if they are satisfied with the medical encounter. Suffice it to say that, the majority of medical programs do not have adequate medical humanities training. Female gender related characteristics of practitioners have been shown in studies to be more productive with respect to quality of communication during medical encounters. These characteristics can be acquired through training and improved communication skills as those who have received the training demonstrated improved medical practice skills in the medical encounter (Frankel & Quill, 2005).

The nature of communication is vital to patient outcomes in medicine. It is a crucial element of the practitioner- patient encounter. Ideally characteristics of the communication should set the stage for fluid, productive engagement during the assessment, case management and thereby enriching the resultant treatment that is ultimately determined to be suitable for the patient. In the past, the biomedical model which was strictly a scientific approach was deemed to be most appropriate to use as doctors were trained as scientists in medicine. The biomedical model considers only the physical body in relation to symptoms. Whereas, according to Margalit et al., (2004,),

the biopsychosocial model "is a style of practice that is oriented to the patient's needs rather than to the doctor's agenda, and which moves from professional control to patient empowerment" (p. 485). As far as the process of exercising the use of this model, the encounter follows a pattern of practice where there is a "patient-centered interview and patient counselling" (Margalit et al., 2004, p.485). In addition, as defined by Engle, "a patient's complaints cannot be considered in isolation from their psychosocial causes and consequences" (p.485). Seemingly, communication issues related to inefficient patient care are becoming more apparent in medicine. The consequences of poor communication affect both the patient and the medical system as a whole where the patient does not receive optimum health care and consequently, there is poor patient recovery amongst other problems such as adverse events with patients and staff. Reasons for the lack of utilization of a comprehensive approach such as the biopsychosocial treatment model as suggested by Margalit et al. is related to inadequate training regarding medical humanities in medical programs.

The population that was selected in Margalit et al. was appropriate and the sample size and method of sampling would yield fairly sound statistical results as the sample size was decent (102 general practitioners, randomly selected from a total of 523 from the North Israel district 44 general practitioners agreed to participate) and it was representative of the population. The participants were randomly placed into one of the two teaching intervention styles and agreed to be videotaped during encounters with real and simulated patients. The dependent variables of the study were patient satisfaction, the duration of the encounter, and whether the physician had prescribed any medication,

ordered any tests, referred the patient to a consultant and gave one or more pieces of advice (Margalit et al., 2004).

As the authors state, "general practitioners provided more psychosocial advice/interventions and prescribed few medications with an increase in patient's satisfaction, thereby supporting some but not all of our prior hypothesis" (Margalit et al., 2004. p. 488). The statistical findings were as follows; "in the didactic group, the proportion of real patients who received medications declined from 54% before the course to 43.5% ($p = .015$); the proportion of patients who received psychosocial instructions/advice increased from 17% to 29% ($p < .001$). The average patient satisfaction increased from 34.2% to 55.7% $p = .00$). There were no significant differences in tests ordered and referrals to specialists before and after the teaching intervention. After the course, the interactive group prescribed fewer medications than did the didactic group (31% vs 43.5%; $p < .02$), offered psychosocial advice more often (57% vs 29%; $p < .0001$), and elicited higher scores of patient satisfaction (69.2% vs 55.7%; $p = .006$)" (Margalit et al., 2004). The interactive teaching group findings were even more significant in the same respects with the simulated patient as stated above. Baliant's notion of "doctor as a drug" is apparent in these findings as less medication was prescribed in light of the physician addressing the emotional needs of the patient (Margalit et al., 2004, p.489).

Gatchel el al (2007) conducted a broad review of the literature related to the biopsychosocial treatment approach components including research concerning the biological, physiological, psychological and sociological natures of the treatment approach. The complexity and multidimensional nature of the biopsychosocial treatment

approach in medicine is present in the proposed study as the most comprehensive and effective means of treating disease and illness. The authors included the most significant studies in each of the following areas: historical conceptual development concerning the ideas of illness, pain theories, the biology and neuroscience of pain. Each of the areas are supported by the link between the neurophysiology of the mind and illness, thereby validating the use of the biopsychosocial treatment approach.

Gatchel et al. (2007) takes a "big picture" or holistic stance on medical treatment and insists that the adoption of the biopsychosocial treatment approach is in the best interests of both the patient and the practitioner in order to achieve optimal treatment outcomes. The debate exists between two treatment approaches being the traditional biomedical model which focuses on the physical symptoms (objective and pathological) of the patient verses the Biopsychosocial treatment model that in addition, considers psychosocial factors. To this effect, the authors specifically investigated physiological factors that are related to the psychological aspects where "...the emotion is the more immediate reaction to nociception (sensing pain) and is more midbrain based. Cognitions then attach meaning to the emotional experience and can then trigger additional emotional reactions and thereby amplify the experience of pain, thus perpetuating a vicious circle of nociception, pain, distress, and disability." (Gatchel et al, 2007, p.583). Research concerning typologies of pain is used to further substantiate the importance of emotions including the gate control theory of pain by Melzack and Wall (1965) and Melzack's body-self neuromatrix model of pain. These models clearly demonstrate the neuroscience of pain and its' link to emotions. This link perpetuates concerns related to the outcome on mental health related issues such as anxiety, depression and anger.

Neuroimaging studies are also examined and offer organic evidence related to specific regions of the brain that relate to the theoretical framework concerning the link between the physiology of pain and emotions. These findings substantiate the need for practitioners to consider the psychological status of their patients during the medical encounters by means of communication style and treatment approach. An open, friendly communication style combined with the use of the biospsychosocial approach would assist with both the comfort level and ease of information disclosure of the patient.

It seems ironic that even though the medical profession is based on human interactions, there is a lack of focus on the dynamics of interpersonal communication. According to Laidlaw, Kaufman, MacLeod, Van Zanten, Simpson & Wrizon, (2006), very little research has been done in the area of communication training and medical performance. Their particular study evaluated the performance of 78 first and second year medical students' characteristics, attitudes and prior communication skills training in order to determine the relationship of each to patient-doctor communication (Laidlaw et al. 2006). The skill competency was measured using the Calgary-Cambridge Guide, interview, a demographic data questionnaire, an attitude scale and a clinical knowledge checklist. It was found that female resident Dalhousie Medical School students scored significantly higher than male resident students for the relationship of resident characteristics with communication skill performance and clinical content checklist score (Laidlaw et al., 2006). Age as a variable was also found to account for significant differences in the above stated relationship where students under 30 years of age scored higher than those over-30s (Laidlaw et al., 2006). In addition, students with English as a first language scored higher than those with English as a second language (Laidlaw et al.,

2006). It is important to note that the Dalhousie Medical School graduate students scored higher than the none-graduates, an indication that their program is effective in teaching medical humanities (Laidlaw et al., 2006). The researchers' findings support "existing literature that demonstrates that patient-doctor communication can be taught, learned and retrained effectively with appropriate training" (Laidlaw et al., 2006, p.23). Dalhousie Medical School is a model medical school that uses a new paradigm of balance in medical training that devotes a significant portion of its program to humanities. To further support this Murray (2006) states, "Medicine is not a science. It is a caring profession that uses science" (p.1). Interestingly enough, medicine was initially philosophically based and evolved into a science- based study which according to Murray (2006), was intended to develop scientific thought processes not to necessarily focus on scientific studies. Murray (2006) summarizes the situation as follows:

> C.P Snow suggests that there were two cultures, the sciences and the humanities. I would argue strenuously that there is only one culture in medicine, a melding of the humanistic and the scientific that cannot be separated. The issue now is to address the imbalance that has occurred with most of the educational process and the emphasis and the evaluation in medicine being heavily weighted towards the biomedical and scientific aspects of medicine to the neglect of the humanities, the value and attitudes of future physicians and the understanding of persons, cultures, community and the role and responsibility of physicians and medicine in society. (p.5)

The Influence of Perceptions on Practitioner-Patient Medical Encounters

Inherent to the difficulties with effective communication are the differences in perceptions of the patients and practitioners. Both the patient and practitioners have their own constructs and belief systems that are not necessarily congruent. This in turn affects the perceptions of both the patient and the practitioner and their subsequent behaviours. This conflict carries through the assessment, case management and treatment of the patient, often times unbeknownst to the patient and practitioners. Sometimes, it takes an adverse event to draw attention to the cause of the problems. According to Katon and Kleinman, (1980, p.133), "the patient's chief concern is "illness" – that is, his or her perceptions of the personal and social significance of the illness as well as the problems created by the experience of it. On the other hand, clinicians schooled in the biomedical paradigm are chiefly concerned with "disease"- that is, malfunctioning and maladaptation of biological or psychological processes, or both. Therefore, doctors socially construct sickness as disease while patients construct sickness as illness". Consequently, patients and doctors interpret that treatment outcome differently based on their perceptions of illness and disease as well. Bearing this perspective in mind, researchers Katon and Kleinman (1980) explored and analyzed a patient case. The patient of this case study underwent a gastrointestinal surgery, that according to the surgeons was successful but she was devastated and attempted an overdose as she felt that her needs were not being met. In order to protect against this unfortunate adverse event in the future, the authors set out a step by step process for doctors to follow that is in line with the biopsychosocial treatment model of care and is as follows: Step 1) doctor facilitates the patient's

explanatory model where the doctor asks the patient to explain their illness, expectations about the type and style of treatment, and what the goals for effective treatment should be. If the necessary information is not retrieved by this method the doctor should proceed to; Step 2) which includes the following: inquire about patient's beliefs concerning five issues being; the cause of the illness, reasons for the onset of symptoms, pathophysiology, severity and type of sickness role and treatment followed by; Step 3) compare the explanatory models of the doctor and the patient explanatory model then negotiate with the patient (Katon & Kleinmen,,1980). According to the researchers, the doctors can use "Lipoiwski's approach which states that the experience of illness usually has only one of four potential meanings for patients: threat, loss, gain or no significance" (p.133). This insight will help the doctor to be more in tune with the patient's needs and concerns thus reducing any potential barrier to effective communication. Returning back to the patient in this case, she had felt that she had lost a part of her body and became depressed along with the post surgical symptoms which affected her whole life. This is a good example of the power of a person's belief systems and how important it is for medical practitioners to consider this when assessing and treating patients. The authors feel that the biopsychosocial treatment model and their step by step method of providing comprehensive care are necessary to avoid adverse events in health care. What if a medical professional has received this training and still encounters difficulties with communication? What might these difficulties be associated with? A lack of educational training may be related to the difficulties that practitioners experience with patients. Medical humanities and biopsychosocial treatment training related to barriers to communication is the key to bridging the gap that exists between best practice and the

reality of what is occurring today during medical encounters. The environment of the medical culture is an open social system with organizational behaviour elements inherent within it. It is the efficiency and effectiveness of the communication that is vital to the operation of the organizations as a whole. This case study is a good example of researchers attempting to create praxis in the medical culture by advocating change. Education empowers practitioners and the patients. It elicits optimal opportunity for healing of patients and decreased costs for the institution.

Research Questions

The research questions for this study were designed to inform the reader concerning the barriers to the quality of communication. This includes consideration of cognitive processing during practitioner-patient interactions regarding patient perceptions, expectations and attitudes related to prejudice, gender stereotypes, cultural proximity and power disparities. Additionally, practitioner communication style, practitioner treatment approach and practitioner competence were examined vicariously through participant's perceptions. The goal of the research questions was to provide information that will be helpful in cultivating mindful practice as it relates to the integration of humanities, leadership, critical thinking skills training into medical education and policy which is needed to bridge theory and practice in order to facilitate the necessary changes. Incorporating these particular competencies into medical curriculum will ensure that the barriers to effective communication will be adequately addressed in medical training programs and the acquired knowledge from the study should lead to improved communicative competence.

FACTORS AFFECTING THE QUALITY

Practitioner and patients perceptions, expectations and attitudes drive their behaviours, thus point to the importance of the consideration of cognitive processes related to critical aspects of the medical encounter. The cognitive behaviour that arises during a medical encounter is essentially driving the nature of the communication and treatment styles that are utilized by practitioners and patients during that time. Ultimately, the culmination of these components leads to a particular treatment outcome in relation to patient satisfaction, patient adherence and patient recovery. With respect to this study, the practitioners' perceptions will not be investigated directly however, patients will be questioned regarding their perceptions of practitioner competence. The practitioner's level of perceived certainty by the patient will be the variable that refers to the practitioner's abilities or level of competence related to communication and assessment skills. The level of certainty will determine the accuracy of assessment, diagnosis and treatment recommendation. This will be a variable that is perceived by the patient as practitioner competence. As for the patient, research has linked the importance of patient satisfaction to the quality of communication during the medical encounter (Schemittdiel,et. al., 2000; Zeltzer, 2007). Although there is limited research that goes beyond this relationship, researchers postulate that if patient satisfaction is high, they will adhere better to treatment, thereby leading to more optimal recovery.

The current study aims to assess the barriers to effective communication by using a survey instrument developed the researcher. Two sets of variables will be used that group independent variables together. The Demographic Framework includes gender, gender concordance, cultural proximity, age, and time since medical encounter. The Medical Framework includes doctor quality, medical dynamics, barriers and networks.

The independent variables indicated above represent the barriers to quality communication. These barriers include perceptions, beliefs, attitudes and expectations related to gender and cultural differences, power disparities, communication styles, treatment approach and practitioner competence. The dependent variables in this study are perceived patient satisfaction, perceived patient adherence and perceived patient recovery. Perceived patient satisfaction refers to the patient's perceptions regarding the management of their medical case and their level of satisfaction. Perceived patient adherence refers to the patient's perception of the degree to which they followed treatment instructions. Perceived patient recovery refers to the patient's perception of the degree to which they feel that they have recovered. The notion of recovery is evaluated in relation to the overall care that they have received from their doctor. The hypotheses are stated below in accordance to each research question.

Specific questions that will be statistically analyzed include the following;

1) Does the gender of the student-participants' correlate with student-participants' perceptions regarding the dependent variables quality of care, case management satisfaction and treatment adherence? It is predicted that females will show more positive ratings than males, as females typically show more attention to their health care, and more supportive attitudes of others.
2) Does the gender of the student-participants' doctors correlate with student-Participants' perceptions regarding the dependent variables? It is predicted that female doctors will be perceived more favourably than male doctors.

3) Does gender concordance between student-participants and their doctors' correlate with student-participants' perceptions in relation to quality of care, case management satisfaction and treatment adherence? It is predicted that gender concordance will be conducive to more positive ratings as gender discordance adds a sexual dynamic factor into the communication mix.
4) Does cultural proximity (ethnic concordance) between student-participant's and their doctors correlate with student-participants' perceptions of quality of care, case management satisfaction and treatment adherence? It is predicted that ethnic concordance will be conducive to more positive ratings as ethnic discordance adds a burden in the form of a cultural dynamic factor into the communication mix.
5) Do the variables of the Demographic-Framework which include variables Gender Concordance, Ethnic Concordance, Age, Gender and Time Since the Medical Encounter predict the dependent variables? It is predicted that the student-participant's of the gender and ethnic concordant groups will rate the dependent variables higher than the disconcordant groups.
6) Do the variables of the Medical-Framework which include Doctor Quality, Care Quality, Barriers and Networks predict the dependent variables? It is predicted that the Medical Framework would serve as a better predictor than the Demographic Framework.

Chapter 3: Methodology

Organization of Study

This study used a mixed-method design as it incorporated both quantitative and qualitative data collection procedures. According to Creswell (2003), there are four decisions that are conceived when selecting a mixed- methods strategy of inquiry which include the following for this study: 1) implementation will be concurrent where the researcher will nest one form of data within another larger data collection procedure in order to analyze different questions or levels of units in an organization; 2) priority being the quantitative dominance to show the prevalence of the need for the study; 3) integration of the qualitative data will be coded and analyzed in the interpretation along with the quantitative data; 4) a theoretical perspective refers to collecting diverse types of data which best provides an understanding of a research problem (Creswell, 2003). As this study utilized both quantitative and qualitative data from a survey, the open-ended questions were one form of data nested within the larger quantitative data collection. This provided the opportunity to both enrich that data and to potentially be made aware of other variables that may not have been considered in this study.

Data Collection

This study involved the administration of a Patient Health Care Communication Survey to University of Windsor students. Quantitative data gathered pertaining to the nature of practitioner's demographics and practice were in the form of patient perceptions of those characteristics and dynamics of the encounter.

The qualitative data were collected through open-ended questions at the end of the quantitative survey form. These questions presented the opportunity for student-

participants to provide more in depth discussions of their perceptions of gender differences, cultural differences, power disparities, communication style, treatment approach and practitioner competence during practitioner-patient encounters.

Description of the Participants

Following approval of the University Board of Ethics, 137 University students were asked to participate in this study. The bulk of the student-participants were engaged in health-care related studies. They were primarily nursing and medical students. This type of sample could be viewed as a uniquely informed convenience sample. The information was collected confidentially and anonymously. One hundred students returned the surveys either fully or partially completed. With respect to the gender of the student-participants, 71% were female and 28.9% were male. Student-participants had identified their doctor's genders as follows, 27.2% female and 72.8% male The ethnicity of the student-patient sample included 73.4% White, 4.3% Black, 7.4% Asian, 12.8% Arabic, 1.1% Aboriginal and 1.1% East Indian. The ethnicity of the doctors that was reported by the student-participants was as follows, 64.8% White, 3.4% Black, 2.3% Latino, 14.8% Asian, 5.7% Arabic and 9.1% East Indian.

Instrumentation

The Patient Health Care Communication Survey is a questionnaire that was developed by the researcher, (see Appendix #1). The quantitative portion of the survey presents questions pertaining to Demographic and Medical related items. The first section presents 5-point Likert scale questions related to respect, caring, patient expectations, treatment approach and communication style utilized by the medical practitioner. The second section includes 5-point Likert scale questions related to practitioner

collaboration, gender differences and cultural differences. The third section presents questions on a 5-point Likert scale that relate to self diagnosis, social support, practitioner patient education, practitioner competence and self efficacy. The last section of the survey relates to perceptions of quality of care including 5-point Likert scale questions related to patient case management satisfaction and patient adherence. The questions on the survey encompass the barriers to effective communication.

Analysis of Data

The quantitative data collected from the surveys was analyzed using the SPSS program. Factor Analysis was performed on the questionnaire items. The variables from the Factor Analysis were analyzed using Multiple Regression Analyses and ANOVA.

The results of the quantitative analysis relate were analyzed in terms of the general knowledge of the patients' that may impact the medical encounter outcomes. The instrument intended to measure the attitudes, perceptions, beliefs and expectations pertaining to gender concordance, cultural proximity, power disparities, communication style, treatment approach and treatment outcomes. The medical encounter outcomes or dependent variables included student-patient perceptions of quality of care, case management satisfaction, and treatment adherence.

The open- ended questions contained in the survey provided qualitative data that were examined in order to identify main themes and extract them. Consistency between the quantitative and qualitative data strengthened the findings.

Chapter IV: Results

Introduction

This study was designed to investigate multiple variables with respect to their relationship to the quality of medical-encounters. The research questions frame the variables into two specific variable sets—a Demographic Framework and a Medical Framework. The Demographic Framework variable set included Gender Concordance, Cultural Proximity (Ethnic Concordance), Age, Gender, and Time Since the Medical Encounter. The Medical Framework variable set included an initial interest in variables in the questionnaire related to communication style, treatment approach and competence. However, factor analysis of the questionnaire using an eigenvalue of 1, and a loading criterion of .50, with at least two questions loading on a factor, generated four medically oriented factors. Factor 1 accounted for 36.6% of the variance and was termed *Doctor Quality* with eight items loading on this factor (Q11, Q12, Q13, Q14, Q15, Q16, Q17, and Q20). Factor 2 which accounted for 9.6% of the variance was termed *Medical Dynamics* with seven items loading on this factor (Q1, Q2, Q3, Q4, Q8, Q11, Q20). Factor 3 which accounted for 7.1% of the variance was termed *Barriers* with five items (Q5, Q21, Q22, Q23, and Q25) loading on this factor. Factor 4 which accounted for 5.5% of the variance was termed *Networks* with four items loading on this factor (Q19, Q26, Q27, Q28). These four factors were then used to form the Medical Framework cluster.

Multiple Regression Analyses were conducted in order to identify which variables predict effects on the three dependent variables which included patient perceptions of quality of care, case management satisfaction and patient adherence. Subsequent Pearson

Product Moment correlation coefficients were examined to determine which variables would have significant relationships in relation to the variable sets and the dependent variables.

A. Descriptive Data

Sample

Demographic information was collected from the student-participants by survey in order to examine gender concordance and cultural proximity. Gender discordance accounted for 57.6% of the sample and gender concordance accounted for 42.4% of the sample. Ethnic discordance accounted for 43.3% of the sample and ethnic concordance accounted for 56.7% of the sample.

1. Survey Responses Specific to the Research Inquiries.

Appendix 2 displays all valid percents for each survey question according to the 5 point scale. The key survey question responses that relate directly to the demographic research inquiries of this study are as follows. In relation to the student-participant's comfort level with their doctor, question #24 states: "I was comfortable with the gender (male/female) of my doctor during my most recent medical encounter." The valid percents include 36% strongly agreed, 42% agreed, 11% were neutral, 10% disagreed and 1% strongly disagreed. In relation to language barriers question #21 states: "I encountered problems with communication related to my language during my most recent medical visit." The valid percents include 1% strongly agreed, 3% agreed, 6% neutral, 31% disagreed and 59% strongly disagreed. In addition, question #22 states: "I felt that there was a barrier to the quality of care that I received related to differences between my cultural beliefs and those of the doctor." The valid percents include 2%

strongly agreed, 5% agreed, 11% were neutral, 33% disagreed and 49% strongly disagreed.

Specific survey question responses that relate directly to the medical research inquiries of this study are as follows. Pertaining to communication style, questions 6 and 7 compare the ideal scenario compared to the actual scenario of the patient's recent medical encounter. Question #6 deals with the ideal scenario and states: "Please rank the following scenarios on a scale of 1 to 3..." The valid percents were as follows: for scenario 1 "prefer-doctor dictated", 9.5% most preferred, 56.8% second most preferred and 33.7% least preferred; for scenario 2 "prefer-doctor interacted-joint decision", 86.5% most preferred, 11.5% second most preferred and 2.1% least preferred; for scenario 3 "prefer-patient decision only", 4.2% most preferred, 33.7% second most preferred and 62.1% least preferred.

By comparison, Question #7 indicates the actual communication style of the encounter, the scenario ratings were as follows: "doctor dictated", 35.4% yes and 64.6% no; "doctor interacted-joint decision", 58.6% yes and 40.4% no; and lastly, "patient decision only" with 6.1% yes and 92.9% no. Therefore, while 86.5% of student-participants most preferred the doctor interacted-joint decision scenario, 58.6% of the student-participants indicated that this communication style scenario actually occurred during the encounter.

In addition to communication style, another key component in the medical variable set is treatment approach of the doctor. Questions #17 states: "My doctor considered multiple aspects of my health condition including my mental and physical well being." The valid percents included 21.2% strongly agreed, 34.3% agreed, 24.2% were neutral,

15.2% disagreed and 5.1% strongly disagreed. With respect to the doctor's consideration of social factors as a component of a holistic treatment approach, question #18 states: " My doctor expressed concerns about my social life." The valid percents included 8.1% strongly agreed, 12.1% agreed, 25.3% were neutral, 33.3% disagreed and 21.2% strongly disagreed. These results suggest that the doctors may not have been using a holistic treatment approach to care in the majority of these encounters.

Question responses related to the dependent measures of this study included the following question #29 states: "Overall, how would you rate your treatment adherence." The valid percents include 33.3% very good, 51.5% good, 13.1% neutral and 2% poor. Question #30 states: "Overall how would you rate the quality of health care service related to your most recent medical problem?" The valid percents include 34.7% very good, 36.7% good, 20.4% neutral, 6.1% poor and 2% very poor. Lastly, question # 31 states: "How satisfied were you with the management of your most recent medical problem?" The valid percents include 32.3% very satisfied, 38.4% satisfied, 19.2% neutral, 7.1% unsatisfied and 3% very unsatisfied.

B. Inferential Data

1. Differences Regarding Gender.

One-Way Anova analyses were performed in order to examine between group differences for female and male student-participants responses. Pertaining to gender differences a significant between group difference was found for the gender of the student-participants and the perceived quality of care received by the student-participants (Q30) where females showed a higher mean (mean= 4.54 SD = .658) than the male mean (mean= 3.73 SD = 1.016) ($F=5.85$, $p<.05$).

In addition, there was a significant between group difference found for the gender of the doctor in relation to the student-participants perception of quality of care and the management satisfaction rating of the student-participants as follows: quality of care, when the doctor was female the student-participants showed a higher mean = 4.54 SD = .658 than when the doctor was male, mean = 3.73 SD = 1.016 ($F= 13.33$ $p< .001$) . In relation to management satisfaction, it was also found that when the doctor was female the student-participants showed a higher mean= 4.36 SD = .638 than when the doctor was male, mean = 3.67 SD = 1.111 ($F= 8.57$ $p <.01$).

2. Differences Related to Gender Concordance

One-way ANOVAs were run to examine the effect of Gender concordance (i.e., when the patient and doctor were of the same sex) on the three dependent variables: quality of care, management satisfaction, and adherence. Means and standard deviations are reported in Table 1. There were no significant differences between concordant and discordant groups for the three dependent variables ($p. > .1$)

Table 1. Descriptive Statistics for Gender Concordance

	Discordant (N=52)			Concordant (N=39)		
	N	Mean	SD	N	Mean	SD
How do you rate your treatment adherence?	52	4.19	.768	39	4.08	.664
How do you rate the quality of health care provided?	52	3.92	1.045	38	3.97	.944
How satisfied with the management of your problem?	52	3.71	1.143	39	4.05	.887

3. Differences Related to Ethnic Concordance.

One-way ANOVAs were run to examine the effect of Ethnic concordance (i.e., when the student-patient and doctor were of the same ethnicity) on the three dependent variables: quality of care, management satisfaction, and adherence. Means and standard deviations are reported in Table 2. There were no significant differences between concordant and discordant groups for two variables: adherence and quality of care ($p. > .1$). However, case management satisfaction was higher for the concordant group, $F(1, 94) = 3.84$, $p = .05$.

Table 2. Descriptive Statistics for Ethnic Concordance

	Discordant			Concordant		
	N	Mean	SD	N	Mean	SD
How do you rate your treatment adherence?	42	4.17	.730	54	4.17	.720
How do you rate the quality of health care provided?	41	3.85	1.108	54	4.02	.921
How satisfied with the management of your problem?	42	3.64	1.246	54	4.06	.811

4. Regression Analyses for the Demographic Framework.

The Demographic Framework includes the variables Gender Concordance, Ethnic Concordance, Age, Patient-Gender, Doctor-Gender, and Time Since Encounter. Using these independent variables three Multiple Regression Analyses were run for the dependent variables of interest: (1) Treatment Adherence, (2) Quality of Care, and (3) Management Satisfaction.

Treatment Adherence

The Multiple Regression analysis showed an R^2 value of .03, which was not significant ($F = .45$. $p > .01$). There were no significant predictors found for any of the independent variables.

Quality of Care

The Multiple Regression analysis showed an R^2 value of .19, which was significant ($F = 3.09$, $p < .01$). There were two significant predictors amongst the independent variables. Gender of the Doctor had the highest beta value (beta = -.322, $t = 2.92$, $p < .01$), followed by Gender-Patient (beta = -.251, $t = 2.1$, $p < .05$). Clearly Gender is an important determinant regarding the perception of care.

Management Satisfaction

The Multiple Regression analysis showed an R^2 value of .22, which was significant ($F = 3.68$, $p < .01$). There were three significant predictors amongst the independent variables. Gender Concordance had the highest beta value (beta = -.273, $t = 2.20$, $p < .05$), followed by Ethnic Concordance (beta = .252, $t = 2.50$, $p < .025$), followed by Gender-Patient (beta = .249, $t = 2.13$, $p < .05$). Clearly Concordance (both Gender

Concordance and Ethnic Concordance) is an important factor regarding the perception of management.

5. Regression Analyses for the Medical Framework

The Medical Framework includes the following factors: Doctor Quality, Medical Dynamics, Barriers and Networks. Each of these variables emerged from the factor analysis and were included as subsets of variables that will be discussed further with respect to correlations later. Using these independent variables three Multiple Regression Analyses were run for the dependent variables of interest: (1) Treatment Adherence, (2) Quality of Care, and (3) Management Satisfaction.

Treatment Adherence

The Multiple Regression analysis showed an R^2 value of .17, which was significant ($F = 4.45$. $p < .01$). There was one significant predictor and that was Networks (beta = .222, $t = 2.0$, $p < .05$). It seems that one's Networks can impact Treatment Adherence. A closer look at the four key questions (Q19, Q26, Q27, and Q28) loading on this factor would suggest that personal effort (Q28) is most important as it shows the strongest correlation with adherence ($r = .36$, $p < .001$). Involvement of another practitioner (Q26, $r = .18$, $p > .05 < .1$) and friends and family support (Q27, $r = .18$, $p > .05 < .1$) were weaker correlates.

Quality of Care

The Multiple Regression analysis showed an R^2 value of .53, which was significant ($F = 25.2$, $p < .001$). There were three significant predictors amongst the independent variables. The Medical Dynamics factor obviously had the highest beta value (beta = .327, $t = 2.36$, $p < .025$), followed by Doctor Quality (beta = .305, $t = 2.4$, $p < .025$), and

Networks (beta = .203, $p < .025$). It would seem simple common sense that judgments about care quality are influenced by a range of positive medical perceptions.

A closer look at the correlates of Care Quality, from the questions on the Questionnaire, showed that feeling the doctor was competent was highest (Q12, $r = .649$, $p < .001$). Other questions with correlations above .5 show variables that contribute to a favourable patient perception (doctor met my expectations, $r = .56$; felt I was involved with management, $r = .55$; I feel doctor provided me enough information, $r = .56$; doctor was easy to talk to, $r = .5$; doctor was open to my input, $r = .58$; doctor listened, $r = .51$; and doctor considered multiple aspects of my condition, $r = .52$).

Case Management Satisfaction

The Multiple Regression analysis showed an R^2 value of .67, which was significant ($F = 44.69$, $p < .001$). There were two significant predictors amongst the independent variables. Doctor Quality had the highest beta value (beta = .436, $t = 4.14$, $p < .001$), and was followed by Medical Dynamics (beta = .3.83, $t = 3.34$, $p < .01$). Clearly Doctor Quality and Medical Dynamics are prominent factors regarding the perception of management. The issues related to barriers and networks were not significant.

C. **Qualitative Data**

Qualitative data was collected via open-ended questions on the survey. Common variables and trends were noted and found to parallel some of the quantitative findings. Specific student-participant quotes were selected to further support the common variables and trends that have emerged from both the quantitative and qualitative data. Focal areas include the following: Group differences for female and male responses, Demographic Framework variables and Medical Framework variables.

1. Differences Related to Gender

In relation to the Gender of the Patient, female student-participants (N=4) commented more often than the male student-participants (N=1) regarding positive perceptions towards female doctors. Student-participants in general mentioned the variable "caring" (N=16) most often in relation to questions asking them about their overall perceptions of the care they received during their most recent medical encounter. The following quote from a female student-participant makes a connection between friendliness, caring and gender: "My last encounters were good but that's because my doctor is very personable. I am a nursing student and have witnessed many impersonal doctors". On a less positive note, another female student-participant stated, "I feel that when I go to see my doctor, he does not do everything that he could to fit my needs, he is always late and seems preoccupied and it feels as if he is not very concerned".

The Gender of the Doctor has been linked to the quality of care and case management satisfaction quantitatively. Gender Concordance with respect to female student-participants seems to be an important factor qualitatively. Female doctors were mentioned as being more desirable multiple times by female (4 times) student-participants as follows: "Gender plays a huge role I think if my physician was female, I would have had my issue already resolved", "I feel because she was a female she was better at communicating my feelings", "There is absolutely no way a male doctor can fully understand female issues" and "I am more comfortable with a woman doctor, since I can relate to her".

2. The Demographic Framework

Patient Ethnicity seems to be linked to patient perceptions of case management satisfaction. The following quotes lend support to this notion: "The doctor that cared for me had cultural knowledge of my culture (he even spoke a little bit of Rwandese language). If anything it might have enhanced the care if we were of the same culture", " I often see the doctor giving the clients of his cultural background extra samples where I don't receive any sample" and "perhaps his culture has something to do with his bedside manner". It is evident that these student-participants felt that both their ethnic background and that of their doctors' ethnicity had an effect on the treatment that they received.

In addition, Doctor Ethnicity and Ethnic Concordance seem to play an important role in case management satisfaction. The following quotes lend support to this notion: "My doctor and I are the same culture, but I wouldn't go to a doctor who was culturally different. I really don't have any real reason. I'm just more comfortable with my own" and "Between my doctor and I, our culture was relatively similar. In that case, the care received from my doctor was easier and understandable".

3. The Medical Framework

Parallel to the quantitative results, Doctor Quality and Care Quality variables were noted by student-participants as indicators of the overall quality of care. Such variables as: enough information given, caring, good listening skills and open communication were the most commonly listed terms. These same variables were mentioned again by student-patients when asked about the quality of communication during their most recent medical encounter. Additional variables that were commonly listed as issues were wait time and

the doctor rushing through the encounter (31 times). Quotes to further support this include the following: "The doctor doesn't listen to you, only uses his input, doesn't ask if client has questions or concerns", "I thought it went well, helped clarify what was going on and calmed my anxieties, thought the doctor was genuinely interested in my well being, didn't jump to conclusions and covered all aspects of treatment, made a referral for a specialist" and "medical professionals show little interest in actually resolving a medical problem. When in doubt, they simply refer to another. The knowledge shown is limited, even specialists are not familiar and do not want to do any further research to resolve the problem. Going from doctor to doctor with no solution is an excessive cost for no purpose". It is evident that the manner in which the doctor communicates with the patient is critical to successful medical encounters. Awareness of gender and ethnic concordance issues, communication and case management skills is essential for effective and efficient patient services.

4. **New Insight from the Qualitative Data**

The open-ended questions offered the opportunity for student-participants to express themselves beyond the survey questions. Interesting comments related to comfort experienced by student-participants when the age of the doctor was close to their age suggests that there may be cohort effects that may influence communication during medical encounters. Another factor that was raised pertained to differences experienced with family doctors as opposed to walk-in clinic doctors. Seemingly, some of the student-participants indicated that they felt very underserved by the walk-in clinic doctors.

Chapter V: Discussion

The purpose of this study was to consider the dynamics of medical encounters in order to identify and understand the variables that help or hinder successful medical encounters between doctors and patients. Such an understanding should have an impact on medical education policies and curriculum as well as to help improve overall medical practice.

Differences Related to Gender

As indicated in prior research (Schittdiel, 2000) the female style of communication has characteristics that are favoured by patients. Both the quantitative and qualitative data from this study support this claim. Both the gender of the patient and the gender of the doctor were linked to quality of care ratings. When the doctor was female, student-participant ratings for the quality of care provided and case management satisfaction were higher. When the student-participant was female, quality of care was rated higher than for male student-participants. These findings suggest that characteristics of females were viewed more positively and were appreciated or recognized more so by female student-patients. This was further supported by the qualitative data that indicated that female student-participants were more supportive of gender concordance with their preference for female doctors. One male student-participant also specifically mentioned that he preferred a female doctor stating: " I felt because she was a female she was better at communicating my feelings". The most common variable mentioned in the open-ended questions was "caring" for both male and female student-participants. This suggests that female doctors' style possesses a caring nature that has an impact on the medical encounter.

In this case, the style of the doctor and gender concordance have an impact on the level of success of the encounter as they relate to the quality of care and case management satisfaction. These variables can act as positive or negative influences on the medical encounter as the presence of female communication characteristics and gender concordance were viewed more favourably by student-participants. Application of these findings to the medical culture implies that these characteristics need to become more prevalent during medical encounter communication. Previous studies (Roter & Hall, 2004; Street, 2002) have indicated that doctors can be trained to learn and incorporate skills into practice in order to improve treatment outcomes. In this case, female communication characteristics and possessing a caring demeanor should be incorporated into medical education.

The Demographic Framework

The gender of the patient, gender concordance and ethnic concordance were all associated with higher ratings for case management satisfaction. Qualitatively, the ethnicity of the patient was linked to case management satisfaction whereby ethnic concordance was favoured by student-participants. Gender and ethnicity definitely play a role during medical encounters that can according to critical discourse analysis help or hinder the success of the linguistic exchange. Critical discourse analysis identifies intrinsic and extrinsic factors that relate to gender, culture, socioeconomics and power (Fairclough, 1989). Inherent in these factors are individual values, norms, stereotypical biases, beliefs and prejudices that interplay during the linguistic exchange (Fairclough, 1989). Therefore, a lack of gender concordance and cultural proximity has the potential to present themselves as barriers to successful communication during medical encounters.

Bearing this in mind, communication skills training for medical students should include a working knowledge of gender and ethnicity based factors and strategies in order for them to overcome these potential barriers to successful communication.

The Medical Framework

In this study, doctor quality, medical dynamics and networks were variables found to be predictors for quality of care ratings and case management satisfaction. Doctor quality includes the following items: enough information given to patients, patient perception of doctor's competence, friendliness, easy to talk to, openness, listening and consideration of multiple aspects of the patient's medical case. The medical dynamics variable includes the following items: overall care, caring nature, expectations met, patient involvement, communication amongst all professionals and enough information given to patient. Networks was also linked to patient adherence. Networks included the following variables: referral given, patient having a sense of control, family support and taking care of one's self.

Doctor Quality in Relation to Quality of Care and Case Management

Qualitative findings supported the quantitative findings where variables related to doctor quality such as the doctor providing enough information, caring, good listening and open communication were most commonly listed in relation to quality of care and case management satisfaction. These findings indicate that characteristics of the doctor, the care given and networks has an impact on patient ratings of the quality of care they received and their ratings of case management satisfaction. The communication style and treatment approach utilized by the doctor (e.g., open, good listening, caring, holistic,

patient-centered approach) are pivotal skills that have the power to influence treatment outcomes.

Qualitative findings support the above stated quantitative findings for doctor quality as it relates to quality of care and case management satisfaction ratings. Common items listed by student-participants in response to open-ended questions about overall care parallel those listed above. The following are examples of such items: "education given by doctor" was indicated 16 times, "thoroughness" was mentioned 10 times, "listening"27 times and "pleasantness" 10 times. It is obvious that the student-participants valued a holistic approach to care and a reciprocal style of communication.

Networks and Patient Adherence

Quantitatively, perceived patient adherence was found to be linked to the independent variable networks. Networks included the following items: referral given, patient having a sense of control, family support, and taking care of one's self. This finding is particularly important as patient adherence to treatment may improve their medical recovery. The use of referrals in a timely fashion is critical for patient recovery in that medical problems can be treated quicker which decreases the chance of secondary illnesses related to delayed treatment. If a patient-centered treatment approach is utilized by the doctor a patient will have a better sense of control over their care. In addition, social support is very important for patients as it assists to mediate their psychological wellbeing and provides assistance for them during a difficult time in their life.

Qualitatively, student-participants indicated that accurate diagnosis (N=6) was important to them coupled with referrals given (N=6) and enough tests (N=6) ordered by the doctor.

Medical Dynamics in Relation to Quality of Care and Case Management

The variable medical dynamics includes the following items: best care, caring, meeting expectations, patient involvement, communication amongst all practitioners involved in case, and enough information given. Relative to past studies, Schmittdiel et al., (2000) found that female doctors met the expectations of both male and female patients more than male doctors. In this study, females gave higher ratings for medical dynamics than males. Higher ratings for quality of care were given for females doctors as opposed to male doctors. Both female and male student-participants were more satisfied with the quality of care that they received and how satisfied they were with the management of their case in relation to gender characteristics which indicates that gender is an important determinant of quality of care. Three predicators for medical dynamics in general included doctor competence, meeting expectations and care quality. It appears that if a doctor interacts with the patient in a strategic, caring manner it has an affect on the outcome perceived care quality.

Qualitatively, some of the female student-patients indicated that they prefer a female doctor. Variables that were listed in the open-ended questions that all student-participants indicated were important in relation to medical dynamics and quality of care included: "thoroughness" (N=10), "decisions made together" (N=4) and "enough information given" (N=16).

Medical Dynamics and Patient Adherence

Although quantitatively, there were no significant findings that linked these two variables there was qualitative data that suggests that there may be a link. Patient adherence may be a precursor for recovery as suggested in past research (Lutfey &

Ketcham, 2005). Student-participants were presented with an open-ended question asking them about their overall recovery based on their medical encounter. The common items that were listed in relation to recovery included the following: normal (N=10), speed of recovery (N=7), good vs. bad (N=24) and recovery needed vs. not needed (N=19). The comments that were made by the student-participants indicated that some of the medical dynamic variables (best care, caring, enough information) had an impact on their recovery. A few examples of quotes pertaining to this are as follows: "It was hard to see a doctor in the hospital I had to wait 8 hours and due to a doctor misdiagnosis at the walk in it extended the recovery time" and "If I better understood what was going wrong with me I may have had a better recovery. I don't feel like doctors really care about their patients. They medicate them and move on to the next patients."

Barriers in Relation to Quality of Care, Case Management and Adherence

Quantitatively, there were no findings that linked the variable barriers to any of the dependent variables. The variable barriers included the following items: additional health problems related to delayed treatment, communication problems, cultural barriers, racial discrimination and inappropriate use of power. However, qualitatively there is some evidence that some of these variable may have an impact on patient outcomes. For example, this quote mentions cultural barriers: " All questions were asked by a student who knows little about my particular problem. He was Indian and difficult to understand" and "Perhaps his culture has something to do with his bedside manner". There were several clues leading to the notion that delayed diagnosis and misdiagnosis were problematic for some of the student-participants. Accurate diagnosis was listed 6 times as a variable in the open-ended questions. In addition, the following quotes

illustrate this notion: "I felt frustrated because the problem is ongoing, the Dr. has not sent me for tests until I requested the tests, it has been months since I have had this problem" and "The doctor was elderly, at least in his 70's. His examination provided him little to no information on my health in general or the subject medical issues. His diagnosis was incorrect based on previous comparative diagnosis. He simple handed out a prescription for brain altering drugs. Nothing was given to solve the problem." In addition, there were quotes supporting ethnic concordance as mentioned in previous sections in the discussion.

Networks in Relation to Quality of Care, Case Management and Adherence

Quantitatively, there were no significant findings in relation to networks, quality of care and case management. Networks included the following items: referral given, patient's sense of control over their health, friend and family support and taking care of one's self. However, quantitatively, there was a significant relationship between networks and perceived patient adherence. The most important item was personal effort, followed by patient involvement and family support. Once again, it appears that a patient-centered approach to care is best in addition to the psychological well being of the patient where their own sense of caring for themselves and family support are key components in relation to how well they adhere to a treatment regime.

Qualitatively there were findings to suggest that these variables do play a role to some extent in patient outcomes. The following quote pertaining to a sense of control illustrates this notion: "I felt in control even though I was ill because I took the time to research what my symptoms could mean allowing me to ask the right questions while with my physician. I felt my physician was satisfied with my level of preparedness and

was interested in my input". The item "enough information" was listed as a common variable throughout the open-ended questions. It is evident that the student-participants based some of their perceptions of the quality of care and case management on patient education which in turn may improve their sense of control.

Linking the Findings to Theory

Looking more deeply into the quantitative and qualitative findings of this study in relation to the theoretical frameworks, it is suggestive that there may be a link between the biopsychosocial approach, critical discourse analysis and the findings related to doctor quality. The independent variable doctor quality includes the following items: enough information given to patients, patient perception of doctor's competence, friendliness, easy to talk to, openness, listening and consideration of multiple aspects of the patient's medical case. These items relate directly to the biopsychosocial approach and critical discourse analysis (Fairclough, 1989). The items that relate to the biopsychosocial approach include: enough information given to patients and consideration of multiple aspects of the patient's medical case. The items that relate to critical discourse analysis include characteristics of communication such as friendliness, easy to talk to, openness and listening. If a patient is relaxed and comfortable he or she is are more likely to divulge information, especially in a non-threatening or intimidating climate. The doctor must do his or her best to create and maintain a positive climate in order to maximize the outcome of the encounter.

There is a link between these items and both the biopsychosocial treatment approach and critical discourse analysis. The biopsychosocial approach is viewed empirically as a successful holistic treatment approach to case management (Arber et al.,

2006; Grabsch, et al., 2006; Morris, 2004; Gupta, 2007). The communication style inherent in the doctor quality variable assists the doctor in gathering information from the patient (e.g., friendliness, easy to talk to, openness, good listening). If a patient is relaxed and comfortable they are more likely to share information, especially in a non threatening or intimidating climate. The doctor must do their best to create and maintain a positive climate in order to maximize the outcome of the encounter. The manner in which the practitioner converses with the patient has the potential to create a positive, reciprocal type of communication exchange or a negative, closed type of communication exchange. This in turn may have an impact on treatment outcomes.

In this study, student-participants were more satisfied with both the quality of care given and the management of their case when the biopsychosocial related items (e.g., patient-centered care and consideration of all aspects of illness) were present during the medical encounter. The biopsychosocial treatment approach is also patient- centered in that the patient is involved in the discussion and the decision making process. Two specific survey questions addressed patient-centered care. One of the questions related to the actual medical encounter scenario and the other was related to their ideal scenario. More of the student-participants (86.5%) indicated that they preferred the patient-centered approach to care as opposed to patient directed or doctor dictated approaches. Patient involvement is a variable contained within the independent variable medical dynamics.

Qualitative findings support the above stated quantitative findings for doctor quality as it relates to quality of care and case management satisfaction ratings. Common items listed by student-patients in response to open-ended questions about overall care

parallel those listed above. The following are examples of such items: education given by doctor (N=16), thoroughness (N=10), listening (N=27) and pleasantness (N=10). It is obvious that the student-patients valued a holistic approach to care and a reciprocal style of communication which both support the biopsychosocial approach to treatment and critical discourse analysis.

Limitations of the Study

There are three main limitations to this study. Firstly, the sample used was a convenience sample where subjects that volunteered to participate were medically oriented. Secondly, there was a gender based difference in that 71% of the sample was female. Thirdly, since a random sample was not used, the results of the study cannot be generalized to the population.

Implications for Future Research

Bringing theory into practice is a great "prescription" for the medical culture. Future research in the area of medical encounter outcomes such as patient adherence and recovery in relation to the quality of communication, communication skills training and demographic barriers is vital for the overall health of the medical system itself. Emphasis should be placed on the nature of female communication style as female doctors seem to be favoured over male doctors in this respect. This will help to substantiate the need for the integration of humanities based courses into curriculum. Future research should also examine current medical curriculum and compare humanities based-programs versus traditional science-based programs in order to ascertain what is going on at the educational institution level. Currently, education policy indicates that humanities must

be an integral part of the inherent in medical curriculum but often exists as a "hidden" curriculum that is not formally taught or evaluated.

Within the area of practice, more studies examining practitioner-patient encounters would be valuable as research in general is limited in this area. Going beyond the current study, a question worth investigating might be, "should patients be matched with same gender and/or ethnicity as a practice"? A possible direction to explore might be to include translators specially trained in health care that would be readily available as a resource to help mediate communication based barriers. With respect to communication style and treatment approach utilized by health practitioners, educational training can help disconcordant groups to improve patient outcomes. Patient simulation training is a tangible manner in which to provide excellent training for practitioners in this area. Another area for future research should involve improvements to the collaborative practice communication which is needed to ensure that all persons involved in the management of a case are on the same page to ensure optimal recovery for patients. This might involve the use of technology and software designed according to the specific needs of the medical context.

Conclusion

Improvement to medical practice in an attempt to enhance patient services has been an ongoing, enduring process for decades. Recently, there has been a shift in the medical culture that has been initiated by high health care costs and adverse patient events. When the many layers of the medical culture are uncovered, the root of the problems may reside deep within each and every medical encounter that occurs. The medical encounter is the heart beat of the culture. Whether it is an encounter with a

doctor or other health practitioners, the events that occur during the process determine the events that follow. In this respect, it is not only doctors that need to be educated regarding the factors that influence medical encounters. Other allied health care professionals also require the requisite training with regards to the factors that contribute to quality patient care and outcomes. Thus, the importance of collaboration among health care practitioners cannot be emphasized enough.

There have been recent changes within the medical culture with respect to increased utilization of nurse practitioners to assist with the shortage of doctors and the efforts by hospitals to improve the quality of care that they provide within their establishments. Even in the political arena, a Patient's Bill of Rights has been passed in Ontario that requires health care providers to treat patients with respect and dignity at all times. In addition, disruptive behaviour legislation has been passed to protect patients from being treated unjustly by doctors. All of these changes are wonderful, however, what is still missed and, is at the heart of the matter, is the educational training of the doctors and allied health care professionals. This responsibility lies with the governing bodies that regulate medical education institutions in that they must formally recognize the need for humanities related training in medical curricula. Medical and allied health care students need to be adequately prepared for quality communication and interactions with their patients. They need to be trained according to what is found to be significant in current research. Currently progressive medical schools are embracing a dualist program approach that incorporates humanities related courses into the curriculum. Their position is that while science is important, knowing how to apply it is more important as it is a craft that is essential for successful practice within the medical field. As the

findings of this study show, quality communication is essential for positive patient outcomes. Providing this important training to medical practitioners will ,however, depend on the reconstitutions of most medical education policies and curriculum.

References

Arber, S., McKinlay, J., Adams, A., Marceau, L., Link, C., & O'Donnell, A. (2006). Patient characteristics and inequalities in doctors' diagnostic and management strategies relating to CHD: A video-simulation experiment. *Social Science & Medicine*, 62, 103-115.

Abreu, B. C., Zhang, L., Seale, G., Primeau, L., & Jones, J. S. (2002). Interdisciplinary meetings: Investigating the collaboration between persons with brain injury and treatment teams. *Brain Injury, 16(8)*, 691-704.

Boyle, K., & Kochinda, C., (2004). Enhancing collaborative communication of nurse and physician leadership in two intensive care units. *Journal of Nursing Administration. 34*(2), 60-70.

Brink-Muinen, A., Dulmen, S., Messerli-Rohrbach, V., & Bensing, J. (2002). Do gender-dyads have different communication patterns? A comparative study in Western-European general practices. *Patient Education and Counseling, 48,* 253-264.

Buerhaus, P. I., Donelan, K., Ulrich, B. T., Norman, L., Williams, M., & Dittus, R. (2005). Hospital RN's and CNO's perceptions of the impact of the nursing shortage on the quality of care. *Nursing Economics$, 3*(5), 214-221.

Direct Engagement Inc. a Specialized News Media Co. Peer-To Peer Roundtable(n.d.). http://www.directenagement.com/ne_roundt_cpe.php.

Egbo, B. (2009). Teaching for Diversity In Canadian Schools. Toronto, Ontario: Pearson Education Canada, pp. 182-204.

Davidson, D. (2007). Strength in nursing leadership: The key to the evolution of intellectual captial in nursing. *Nurse Admin Q, 31*, 36-42.

Dube, C. E., & Fuller, B. K. (2008). A qualitative Study of Communication Skills for Male Cancer Screening Discussions. *Journal of Cancer Education, 18*(4), 182-187.

Frankel, R. M., & Quill, T. (2005). Integrating Biopsychosocial and Relationship-Centered Care into Mainstream Medical Practice: A Challenge That Continues to Produce Positive Results. *Families, Systems & Health, 23*(4), 413-421.

Hall, J. A., & Roter, D. L. (1998). Medical Communication and Gender: A Summary of Research. *The Journal of Gender-Specific Medicine, 2,* 39-42.

Hall, J. A., & Roter, D. L. (2002). Do patients talk differently to male and female physicians?. Meta-analytic review. *Patient Education and Counseling, 48*, 217-224.

Hoy, W. K., & Miskel, C. G. (2008). Educational Administration; Theory, Research, and Practice, Eighth Edition. City??: McGraw-Hill.

Kerfoot, K. (2002). On Leadership Messy Conversations and the Willingness to Be Disturbed. *Nursing Economics$, 20(6)*, 297-299.

Haddock, S. A., & Lyness, K. P. (2002). Three Aspects of the Therapeutic Conversation in Couples Therapy: Does Gender Make a Difference? *Journal of Couple & Relationship Therapy, 1,* 5-23.

Hagihara, A., Tarumi, K., & Nobutomo, K. (2006). Physicians' and Patients' Recognition of the Level of the Physician's Explanation in Medical Encounters. *Health Communications 20*(1), 101-104.

Kaslow, N. J., et al. (2007). Health Care for the Whole Person: Research Update. *Professional Psychology: Research and Practice. 38*(3), 278-289.

Katon, W. & Kleinman, A. (1980). A Biopsychosocial Approach to Surgical Evaluation and Outcome. *The Western Journal of Medicine, 133*, 9-14.

Kerfoot, K. (2002). Messy Conversations and the Willingness to Be Disturbed. *Nursing Economics$, 20*, 297-299.

Laidlaw, T. S., Kaufman, D. M., MacLeod, H., van Zanten, S., Simpson, D., & Wrizon, W. (2006). Relationship of resident characteristics, attitudes, prior training and clinical knowledge to communication skills performance. *Medical Education, 40*, 18-25.

Lynch, M. E., Campbel, F. A., Clark, A. J., Dunbar, M. J., et al. (2007). Waiting for treatment for chronic pain-a survey of existing benchmarks: Toward establishing evidence-based benchmarks for medically acceptable waiting times. *Pain Res Manage, (12)4*, 245-247.

Ledlow, G. R., O'Hair, H. D., & Moore, S. (2003). Predictors of Communication Quality: The Patient, Provider, and Nurse Call Center Triad. *Health Communications. 15*(4), 431-455.

Lutfey., K. E., & Ketcham, J. D. (2005). Patient and Provider Assessments of Adherence and the Sources of Disparities: Evidence from Diabetes Care. *Health Services Research. 40*(6), 1803-1817.

Margalit, A. P. A., Glick, S. M., & Benbassat, A. C. (2004). Effect of a Biopsychosocial Approach on Patient Satisfaction and Patterns of Care. *Journal of General International Medicince, 19*, 485-491.

Mast, M. S., Hall, J. A., & Roter, D. L. (2006). Disentangling physician sex and physician communication style: Their effects on patient satisfaction in a virtual medical visit. *Patient Education and Counseling, 68,* 16-22.

Mills, N. M., Haun, L. L., & Daldrup, D. (2000). Kansas City Colleagues in Caring Giving New Meaning to Networking. *Journal of Nursing Education, 39(2),* 54-56.

Murray, T. J., (2008). Medical Humanities at Dalhousie. http://humanities.medicine.dal.ca/why.htm

Parish, W. L. Aniruddha Das., & Laumann, E. O. (2006). Sexual Harassment of Women in Urban China. *Arch Sex Behaviour, 35,* 411-425.

Pierson, P., Miller, J., & Moore, K. (2007). Engaging Staff in the Magnet Journey: The Key is Communication. *MEDSURG Nursing, 16,* 23-28.

Philgrim, D., (2008). The Biopsychosocial Model in anglo-American Psychiatry: Past, Present and Future? http:/www.critpsynet.freeuk.com/philgrim.htm

Poskiparta, M., Ketunen, T., & Liimatainen, L. (2000). Questioning and advising in health counselling: results from a study of Finnish nurse counsellors. *Health Education Journal.* 59, 69-89.

Rosenstein, A. H. (2002). Nurse-Physician Relationships: Impact on Nurse Satisfaction and Retention. *American Journal of Nursing. 102*(6), 26-34.

Roter, D. L., & Hall, J. A. (2004). Physical Gender and Patient-Centered Communication: A Critical Review of Empirical Research. *Annual Reviews Public Health, 25,* 497-519.

Roter, D. L., Hall, J. A., & Yutaka, A. (2008). Physician Gender Effects in Medical Communication, A Meta-analytic Review. *JAMA, 288,* 756-764.

Rudolfsson, G., von Post, I., & Eriksson, K. (2007. The Development of Caring in the Perioperative Culture Nurse Leaders' Perspective on the Struggle to Retain Sight of the Patient. *Nursing Administration, 31(4),* 312-324.

Sawa, R. J., Phelan, A., Myrick, F., Barlow, C., Hurlock, D., & Rogers, G. (2006). The anatomy and physiology of conflict in medical education: a doorway to diagnosing the health of medical education systems. *Medical Teacher, 28(*8*),* 204-213.

Schmittdiel, J., Grumback, K., Selby, J. V., & Quesenberry, C. P. (2000). Effect of Physician and Patient Gender Concordance on Patient Satisfaction and Prevention Care Practices. *Journal of General International Medicine.* 15, 761-769.

Simpson, J. L., & Carter, K. (2008). Muslim Womens Experiences With Health Care Providers in a Rural Area of the United States. *Journal of Transcultural Nursing, 19,* 16-23.

Sivesind, D., et al. (2003). Communicating with Patients in Cancer Care; What Areas Do Nurses Find Most Challenging. *Journal of Cancer Education. 18*(4), 202-209.

Stapleton, P., Henderson, A., Creedy, D. K., Cooke, M., et al. (2007). Boosting morale and improving performance in the nursing setting. *Journal of Nursing Management, 15,* 811-816.

Street, R. L. (2002). Gender differences in health care provider-patient communication: are they due to style, stereotypes, or accommodation? *Patient Education and Counselling*, 48, 201-206.

Suchman, A. L. (2005). The Current State of the Biopsychosocial *Approach. Families, Systems, & Health, 23(4), 450-452.*

Toolan, M. (2002). Critical Discourse Analysis, Critical Concepts in Linguistics. Taylor & Francis (Routledge).

Tracey, C. & Nicholl, H. (2006). Mentoring and networking. *Nursing Management, 12(*10), 28-32.

Utley-Smith, Q. (2004). Needed by New Baccalaureate Graduates. *Nursing Education Perspectives, 25(4),* 166-170.

Van Soeren, M. H., & Micevski, V. (2001). Success Indicators and Barriers to Acute Nurse Practitioner Role Implementation in Four Ontario Hospitals. *AACN Clinical Issues,12(3),* 424-437.

Wenger, E., McDermott, R., & Snyder, W. (2002). Cultivating Communities of Practice : A guide to managing knowledge. Harvard Business School Press: Boston, MA.

Weiner, M., & Blondich, P. (2005). The Influence of Information Technology on Patient-Physician Relationships. *Journal of General International Medicine, 21,* 35-39.

Woodrow, S. I., Gilmer-Hill, H., & Rutka, J. T. (2006). The Neurosurgical Workforce in North America: A Critical Review of Gender Issues. *Neurosurgery, 59,* 749-758.

Zayas, L. H., Cabassa, L. J., Perez, M. C., & Howard, M. O. (2005). Clinician-Patient Ethnicity in Psychiatric Diagnosis: A Pilot Study with Hispanics. *Journal of Ethnic & Cultural Diversity in Social Work, 14,* 93-109.

APPENDIX 1
PATIENT HEALTH CARE COMMUNICATION SURVEY

The intent of this survey is to gather information from patients regarding communication related to quality of care. The information in this survey will remain confidential and will be used in the completion of a Master's thesis in Education by researcher Amy Stasso.

You are not required to put your name on the survey or the envelop. If you feel unable to answer a question simply skip over it. Upon completion of the survey, put it in the envelope provided, seal it and deposit it into the locked survey collection box located in the entrance of the AIREC department. If you are interested in viewing the results of the study, please refer to the Letter of Information that has been given to you for information regarding access to the results. If you do not have access to a computer, please contact the researcher and the results will be sent to you. Please inform the researcher if you require any assistance during the completion of the survey.

Thank you for participating in this study. Your assistance is greatly appreciated and will help to identify the current status of communication within the medical culture in addition to offering information about communication in medical encounters and related patient care outcomes. Through obtaining your knowledge about the operations within the healthcare environment it is my hope that beneficial changes can be made in the future to improve the experience and the quality of care offered to patients.

DEMOGRAPHICS

Age_____

Gender_____

Ethnicity _____

What was the date of your most recent medical encounter?_____

What is the gender of your family doctor?----------

What is the ethnicity of your family doctor?----------

CASE MANAGEMENT- MEDICAL SECTION

PLEASE INDICATE YOUR OPINION BELOW CONCERNING EACH STATEMENT BASED ON YOUR MOST RECENT MEDICAL VISIT TO YOUR DOCTOR.

Q1. I feel that I received the best possible care with respect to my most recent medical encounter? Please circle.

Strongly Agree Agree Neutral Disagree Strongly Disagree

Q2. I feel that the health care practitioners involved in my case demonstrated a caring attitude about my health issue? Please circle.

Strongly Agree Agree Neutral Disagree Strongly Disagree

Q3. My expectations were met by my doctor during my most recent medical visit. Please circle.

Strongly Agree Agree Neutral Disagree Strongly Disagree

Q4. I feel that I was involved in the management of my case? Please circle.

Strongly Agree Agree Neutral Disagree Strongly Disagree

Q5. I experienced additional health problems as a result of delayed treatment? Please circle.

Strongly Agree Agree Neutral Disagree Strongly Disagree

Q6. Please rank the following scenarios on a scale of 1 to 3 where, 1 indicates the most preferred, 2 indicates the second most preferred and 3 indicates the least preferred:

_____ the doctor dictates all aspects of the treatment where the patient does not participate with exception to answering the questions that the doctor asks.

_____ the doctor interacts with the patient and together decisions are made.

_____ the patient makes all of the decisions about diagnosis and treatment.

Q7. Please place an X by the medical visit scenario below that most accurately describes your most recent medical encounter with the doctor.

_____ the doctor dictated all aspects of the treatment where I did not participate with the exception of answering the questions that the doctor asked me.

_____ the doctor interacted with me and together we made decisions about treatment.

_____ I told the doctor what was wrong with me and what the treatment should be.

Q8. I feel that all of the health care professionals involved in your case communicated well with each other? Please circle one of the options below.

Strongly Agree Agree Neutral Disagree Strongly Disagree

Q9. I recommend using the internet as a resource to investigate your symptoms before you are diagnosed? Please circle

Strongly Agree Agree Neutral Disagree Strongly Disagree

Q10. I used the internet as a resource to investigate my symptoms after I was diagnosed? Please circle

Strongly Agree Agree Neutral Disagree Strongly Disagree

Q11. I feel that the doctor provided me with enough information concerning my health problem during my most recent medical visit? Please circle.

Strongly Agree Agree Neutral Disagree Strongly Disagree

Q12. I feel that the doctor that managed my most recent medical problem was competent? Please circle

Strongly Agree Agree Neutral Disagree Strongly Disagree

Q13. My doctor was very friendly during my most recent medical visit. Please circle.

Strongly Agree Agree Neutral Disagree Strongly Disagree

Q14. My doctor was very easy to talk to. Please circle.

Strongly Agree Agree Neutral Disagree Strongly Disagree

Q15. My doctor was very open to my input during my most recent medical visit. Please circle.

Strongly Agree Agree Neutral Disagree Strongly Disagree

Q16. My doctor listened attentively to me during my most recent medical visit. Please circle.

Strongly Agree Agree Neutral Disagree Strongly Disagree

Q17. My doctor considered multiple aspects of my health condition including my mental and physical well being. Please circle.

Strongly Agree Agree Neutral Disagree Strongly Disagree

Q18. My doctor expressed concerns about my social life. Please circle.

Strongly Agree Agree Neutral Disagree Strongly Disagree

Q19. My doctor gave me a referral to another type(s) of practitioner(s) (different area(s) of expertise) to help my case. Please circle.

Strongly Agree Agree Neutral Disagree Strongly Disagree

Q20. Overall, I feel that the quality of communication during my most recent medical visit was good. Please circle.

Strongly Agree Agree Neutral Disagree Strongly Disagree

CASE MANAGEMENT – DEMOGRAPHIC SECTION

Q21. I encountered problems with communication related to my language during my most recent medical visit. Please circle.

Strongly Agree Agree Neutral Disagree Strongly Disagree

Q22. I felt that there was a barrier to the quality of care that I received related to differences between my cultural beliefs and those of the doctor. Please circle.

Strongly Agree Agree Neutral Disagree Strongly Disagree

Q23. I experienced racial discrimination during my most recent medical visit. Please circle.

Strongly Agree Agree Neutral Disagree Strongly Disagree

Q24. I was comfortable with the gender (male/female) of my doctor during my most recent medical encounter. Please circle.

Strongly Agree Agree Neutral Disagree Strongly Disagree

Q25. I felt that the doctor took advantage of their professional status related power during my most recent medical visit. Please circle.

Strongly Agree Agree Neutral Disagree Strongly Disagree

Q26. I feel that I am in control of my health problem, Please circle.

Strongly Agree Agree Neutral Disagree Strongly Disagree

Q27. I have friends and/or family that offer me support. Please circle.

Strongly Agree Agree Neutral Disagree Strongly Disagree

Q28. I try hard to take good care of myself. Please circle.

Strongly Agree Agree Neutral Disagree Strongly Disagree

CASE MANAGEMENT- PATIENT OUTCOMES

Q29. Overall, how would you rate your treatment adherence? (how well you follow the doctor instructions) Please circle.

Very Good Good Neutral Poor Very Poor

Q30. Overall how would you rate the quality of health care service related to your most recent medical problem? Please circle one of the options below.

Very Good Good Neutral Poor Very Poor

Q31. How satisfied were you with the management of your most recent medical problem? Please circle one of the options below.

Very Satisfied Satisfied Neutral Unsatisfied Very Unsatisfied

PLEASE CONTINUE TO THE NEXT PAGE. THANK YOU

OPEN-ENDED QUESTIONS

YOU MAY USE THE LINED PAPER THAT HAS BEEN PROVIDED FOR YOU IF YOU REQUIRE MORE SPACE TO WRITE YOUR ANSWER .

Q32. What are your perceptions of your most recent medical treatment? Please Explain.

Q33. How do you feel about the care you received during your most recent medical visit or visit to your doctor? Please explain.

Q34. How would you describe the nature of the communication between you and your doctor during your most recent medical visit or visit to your doctor?

Q35. Do you feel that the gender of your doctor had an effect on the care you received during your most recent medical visit or visit to your doctor? Please explain.

Q36. Do you feel that cultural differences between yourself and your doctor had an effect on the care you received during your most recent medical visit or visit to your doctor? Please explain.

Q37. Overall, how would you describe your level of recovery in relation to your most recent experience during a medical visit or visit to your doctor?

END OF SURVEY

APPENDIX 2
PATIENT HEALTH CARE COMMUNICATION SURVEY

The intent of this survey is to gather information from patients regarding communication related to quality of care. The information in this survey will remain confidential and will be used in the completion of a Master's thesis in Education by researcher Amy Stasso.

You are not required to put your name on the survey or the envelop. If you feel unable to answer a question simply skip over it. Upon completion of the survey, put it in the envelope provided, seal it and deposit it into the locked survey collection box located in the entrance of the AIREC department. If you are interested in viewing the results of the study, please refer to the Letter of Information that has been given to you for information regarding access to the results. If you do not have access to a computer, please contact the researcher and the results will be sent to you. Please inform the researcher if you require any assistance during the completion of the survey.

Thank you for participating in this study. Your assistance is greatly appreciated and will help to identify the current status of communication within the medical culture in addition to offering information about communication in medical encounters and related patient care outcomes. Through obtaining your knowledge about the operations within the healthcare environment it is my hope that beneficial changes can be made in the future to improve the experience and the quality of care offered to patients.

DEMOGRAPHICS

Age_____

Gender_____

Ethnicity _____

What was the date of your most recent medical encounter?_____

What is the gender of your family doctor?----------

What is the ethnicity of your family doctor?----------

CASE MANAGEMENT- MEDICAL SECTION

PLEASE INDICATE YOUR OPINION BELOW CONCERNING EACH STATEMENT BASED ON YOUR MOST RECENT MEDICAL VISIT TO YOUR DOCTOR.

Q1. I feel that I received the best possible care with respect to my most recent medical encounter? Please circle.

26.3%	39.4%	23.2%	8.1%	3.0%
Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree

Q2. I feel that the health care practitioners involved in my case demonstrated a caring attitude about my health issue? Please circle.

27.3%	47.5%	16.2%	5.1%	4.0%
Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree

Q3. My expectations were met by my doctor during my most recent medical visit. Please circle.

20.2%	47.2%	16.2%	11.1%	5.1%
Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree

Q4. I feel that I was involved in the management of my case? Please circle.

21.2%	38.4%	29.3%	10.1%	1.0%
Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree

Q5. I experienced additional health problems as a result of delayed treatment? Please circle.

5.1%	7.1%	20.2%	37.4%	30.3%
Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree

Q6. Please rank the following scenarios on a scale of 1 to 3 where, 1 indicates the most preferred, 2 indicates the second most preferred and 3 indicates the least preferred:

9.5%_ the doctor dictates all aspects of the treatment where the patient does not participate with exception to answering the questions that the doctor asks.

86.2% the doctor interacts with the patient and together decisions are made.

4.2% the patient makes all of the decisions about diagnosis and treatment.

Q7. Please place an X by the medical visit scenario below that most accurately describes your most recent medical encounter with the doctor.

35.4% the doctor dictated all aspects of the treatment where I did not participate with the exception of answering the questions that the doctor asked me.

58.6% the doctor interacted with me and together we made decisions about treatment.

6.1%_ I told the doctor what was wrong with me and what the treatment should be.

Q8. I feel that all of the health care professionals involved in your case communicated well with each other? Please circle one of the options below.

14.0%	39.0%	34.0%	8.0%	5.0%
Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree

Q9. I recommend using the internet as a resource to investigate your symptoms before you are diagnosed? Please circle

10.0%	32.0%	30.0%	16.0%	12.0%
Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree

Q10. I used the internet as a resource to investigate my symptoms after I was diagnosed? Please circle

14.0%	37.0%	20.0%	16.0%	13.0%
Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree

Q11. I feel that the doctor provided me with enough information concerning my health problem during my most recent medical visit? Please circle.

20.0%	44.0%	19.0%	13.0%	4.0%
Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree

Q12. I feel that the doctor that managed my most recent medical problem was competent? Please circle

33.3%	**43.4%**	**15.2%**	**6.1%**	**2.0%**
Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree

Q13. My doctor was very friendly during my most recent medical visit. Please circle.

41.4%	38.4%	12.1%	5.1%	3.0%
Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree

Q14. My doctor was very easy to talk to. Please circle.

38.0%	33.0%	21.0%	6.0%	2.0%
Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree

Q15. My doctor was very open to my input during my most recent medical visit. Please circle.

32.0%	34.0%	23.0%	9.0%	2.0%
Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree

Q16. My doctor listened attentively to me during my most recent medical visit. Please circle.

32.0%	32.0%	19.0%	13.0%	4.0%
Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree

Q17. My doctor considered multiple aspects of my health condition including my mental and physical well being. Please circle.

21.2%	34.3%	24.2%	15.2%	5.1%
Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree

Q18. My doctor expressed concerns about my social life. Please circle.

8.1%	12.1%	25.3%	33.3%	21.2%
Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree

Q19. My doctor gave me a referral to another type(s) of practitioner(s) (different area(s) of expertise) to help my case. Please circle.

20.2%	25.3%	14.1%	25.3%	15.2%
Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree

Q20. Overall, I feel that the quality of communication during my most recent medical visit was good. Please circle.

28.0%	37.0%	22.0%	9.0%	4.0%
Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree

CASE MANAGEMENT – DEMOGRAPHIC SECTION

Q21. I encountered problems with communication related to my language during my most recent medical visit. Please circle.

1.0%	3.0%	6.0%	31.0%	59.0%
Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree

Q22. I felt that there was a barrier to the quality of care that I received related to differences between my cultural beliefs and those of the doctor. Please circle.

2.0%	5.0%	11.0%	33.0%	49.0%
Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree

Q23. I experienced racial discrimination during my most recent medical visit. Please circle.

0%	2.0%	5.1%	29.3%	63.6%
Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree

Q24. I was comfortable with the gender (male/female) of my doctor during my most recent medical encounter. Please circle.

36.0%	42.0%	11.0%	10.0%	1.0%
Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree

Q25. I felt that the doctor took advantage of their professional status related power during my most recent medical visit. Please circle.

2.0%	5.0%	17.0%	30.0%	46.0%
Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree

Q26. I feel that I am in control of my health problem. Please circle.

18.0%	33.0%	29.0%	14.0%	6.0%
Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree

Q27. I have friends and/or family that offer me support. Please circle.

38.4%	45.5%	13.1%	2.0%	1.0%
Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree

Q28. I try hard to take good care of myself. Please circle.

38.0%	43.0%	13.0%	5.0%	1.0%
Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree

CASE MANAGEMENT- PATIENT OUTCOMES

Q29. Overall, how would you rate your treatment adherence? (how well you follow the doctor instructions) Please circle.

33.0%	51.5%	13.1%	2.0%	0%
Very Good	Good	Neutral	Poor	Very Poor

Q30. Overall how would you rate the quality of health care service related to your most recent medical problem? Please circle one of the options below.

34.7%	36.7%	20.4%	6.1%	2.0%
Very Good	Good	Neutral	Poor	Very Poor

Q31. How satisfied were you with the management of your most recent medical problem? Please circle one of the options below.

32.3%	38.4%	19.2%	7.1%	3.0%
Very Satisfied	Satisfied	Neutral	Unsatisfied	Very Unsatisfied

PLEASE CONTINUE TO THE NEXT PAGE. THANK YOU

OPEN-ENDED QUESTIONS

YOU MAY USE THE LINED PAPER THAT HAS BEEN PROVIDED FOR YOU IF YOU REQUIRE MORE SPACE TO WRITE YOUR ANSWER .

Q32. What are your perceptions of your most recent medical treatment? Please Explain.

Q33. How do you feel about the care you received during your most recent medical visit or visit to your doctor? Please explain.

Q34. How would you describe the nature of the communication between you and your doctor during your most recent medical visit or visit to your doctor?

Q35. Do you feel that the gender of your doctor had an effect on the care you received during your most recent medical visit or visit to your doctor? Please explain.

Q36. Do you feel that cultural differences between yourself and your doctor had an effect on the care you received during your most recent medical visit or visit to your doctor? Please explain.

Q37. Overall, how would you describe your level of recovery in relation to your most recent experience during a medical visit or visit to your doctor?

END OF SURVEY

University of Windsor

LETTER OF INFORMATION FOR CONSENT TO PARTICIPATE IN RESEARCH

Title of Study: Barriers to Quality Communication in Medical Practitioner-Patient Encounters; Implications for Medical Education

You are asked to participate in a research study conducted by Amy Stasso, Master's of Education Candidate and Dr. Benedicta Egbo, Thesis Supervisor from the Faculty of Education at the University of Windsor for contribution towards a Master's thesis.

If you have any questions or concerns about the research, please feel to contact Amy Stasso at (519) 903-6015 and/or the Faculty Supervisor Dr. Benedicta Egbo at (519)253-4232.

PURPOSE OF THE STUDY

The Purpose of the study is to determine the quality of practitioner-patient communication during medical encounters. This will be determined by investigating the impact of certain variables on treatment outcomes such as patient satisfaction, perceived patient adherence and perceived patient recovery. Variables that are included in the survey that relate to the quality of practitioner-patient communication include gender differences, cultural differences, power differentials, communication style, treatment approach and practitioner competence.

PROCEDURES

If you volunteer to participate in this study, you will be asked to:

1) Complete a survey 2) Place the completed survey into the envelope that has been provided to you and seal it. Do not place your name on the survey or the envelope 4) Deposit the survey into the survey deposit box in the student lounge area of the Health Education Centre.

The survey will take 20 to 30 minutes to complete.

POTENTIAL RISKS AND DISCOMFORTS

This is a very low risk study, however, some questions in the survey may elicit emotions that are uncomfortable. Please notify the researcher and/or the Windsor Health Unit for support services that are available in your area by calling (519) 258-2146.

POTENTIAL BENEFITS TO SUBJECTS AND/OR TO SOCIETY

Your voluntary participation in this study is greatly appreciated and will help to improve the quality of services that patients receive in the future.

COMPENSATION FOR PARTICIPATION

There is no compensation for participation in this study.

CONFIDENTIALITY

Any information that is obtained in connection with this study and that can be identified with you will remain confidential and will be disclosed only with your permission.

You are not required to place your name on the survey to ensure confidentiality and anonymity of your responses. The surveys will be deposited into a locked survey deposit box and emptied daily by the researcher. The surveys will be shredded when the research is complete in the winter term of 2011.

PARTICIPATION AND WITHDRAWAL

You can choose whether to be in this study or not. If you volunteer to be in this study, you may not withdraw from the study if you have already deposited the survey into the survey deposit box. You may also refuse to answer any questions you don't want to answer and still remain in the study. The investigator may withdraw you from this research if circumstances arise which warrant doing so.

FEEDBACK OF THE RESULTS OF THIS STUDY TO THE SUBJECTS

Information collected for this study will not identify you individually. Results are reported on a group basis. A copy of the results will be available on the University of Windsor Research Ethics Board website www.uwindsor.ca/reb/study-results and may also be obtained from the researcher Amy Stasso by contacting her at (519) 903-6015. The results should be posted in the winter term of 2011.

SUBSEQUENT USE OF DATA

This data will not be used in subsequent studies.

RIGHTS OF RESEARCH SUBJECTS

If you have questions regarding your rights as a research subject, contact: Research Ethics Coordinator, University of Windsor, Windsor, Ontario N9B 3P4; Telephone: 519-253-3000, ext. 3948; e-mail: ethics@uwindsor.ca

SIGNATURE OF INVESTIGATOR

These are the terms under which I will conduct research.

_____ _____

Signature of Investigator Date

Vita Auctoris

Amy Stasso was born in 1972 in Windsor, Ontario. She graduated from Holy Names High School in 1990. From there she went on to the University of Windsor where she obtained a Bachelor of Human Kinetics, Honours Movement Science Degree in 1996, a Bachelor of Arts, Honours Psychology in 2004, and a Bachelor of Education in 2010. She is currently a candidate for a Master's Degree in Education at the University of Windsor and hopes to graduate in the summer of 2011.