Communication Practices and Face Negotiation in Patient-Pharmacist Interactions

by

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Abstract

Pharmacists' roles are evolving from dispensing to providing patient-centred care. Appropriate patient-pharmacist communication is important in achieving patient-centred care aims. The research in this dissertation explored audiotaped recordings of pharmacist-patient interactions to determine communicative practices and how pharmacist and patient use strategic communication to achieve instrumental and interpersonal goals. In the first published study of this dissertation, recorded interactions provided insight into the extent of biomedical versus patient-centred communication in patient-pharmacist exchanges. Studies were identified by searching: Medline, Embase, International Pharmaceutical Abstracts (IPA), Web of Science, and Academic Search Complete. Inclusion criteria were that studies were published in English. Key search terms included: "audio recording", "video recording", "communication", "patient counselling", "patient interaction", "discourse analysis", "conversation analysis", "narrative analysis", and "content analysis". The review the included 41 studies found that biomedical and patient centred communication focused researches were framed within quantitative, qualitative methods, including conversational analysis. Twenty-three studies presented evidence of a biomedical model, whereas eight studies characterized a patient-centred focus. Respect, dignity, autonomy, and acknowledgment affect patient-pharmacist communication process and no study explored the effect of neither these factors nor the social context on this communication process. In the second study in this thesis, the advantages of using face-work theory to analyze patient-pharmacist interactions were identified. The second study described the concept of face and the three types of face needs. Pharmacists and patients demonstrated these three types of face needs during their interaction with each other and the third study in this thesis explored how these face needs are negotiated and challenged by both parties. The study used an exploratory descriptive

design to identify the major contexts of expressing and negotiating face in audio-recorded community pharmacist-patient interactions. Its results explained how certain speech acts linked with face needs in order to avoid or mitigate face threat and how successful pharmacist-patient relationships are established when both pharmacist and patient have mutual understanding of their face needs. The research results contained in this dissertation contribute to knowledge about how pharmacists combine instrumental communication strategies to achieve patience centred goals for patient education, medication assessment and self-care management. Simultaneously, pharmacists attend to interpersonal face needs in the domains of competence, autonomy and solidarity, because without attention to these facets of interaction, instrumental goals are more difficult to achieve. Although the data from the empirical studies in this dissertation are limited by sample size and audio-only recording format, this research provides a unique insight into face-work interaction in the context of pharmacy practice. Face-Work Theory provides a useful mechanism by which to understand how professional pharmacy interactions are most effective when mutual face needs are supported and actual or potential face threats are avoided or mitigated. These findings may be useful to guide pharmacy education to support patient centred practice. Further research using video-recorded pharmacy interactions is required to confirm and extended these findings.

Preface

This thesis is an original work by Muna S. Murad. The research project, of which this thesis is a part, received research ethics approval from the Health Research Ethics Board (HREB) at the University of Alberta Research Ethics Board, Project Name "Expressing and Negotiating Face in Community Patient-Pharmacist Interactions", No: Pro00015163, April 29, 2011. Chapter 2 of this thesis has been published as Muna S. Murad, Trish Lyn Chatterley, and Lisa Guirguis. "A meta-narrative review of recorded patient–pharmacist interactions: Exploring biomedical or patient-centred communication?" *Research in Social and Administrative Pharmacy*, *10* (1), 1-20. I was responsible for the manuscript composition. Trish Lyn Chatterley contributed to manuscript edits. Lisa Guirguis was the corresponding author and was involved with concept formation and manuscript composition.

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Chapter One

1.1. Introduction

In this first chapter, I present an overview of the entire dissertation, its objectives, and links between the three manuscripts. Pharmacy Practice has evolved significantly since it was established as a practice discipline profession in 1821. Hibgy, Knowlton, & Penna (1996) described the four eras of pharmacy. The first era was the dispensing era, from 1910 to 1965, where pharmacists' work primarily consisted of counting and pouring (Hibgy et al., 1996). From 1965 to 1990 was the clinical era and pharmacists shared their drug expertise with physicians and patients (Hibgy et al., 1996). The pharmaceutical care era start from 1990 and pharmacists were encouraged to improve the life quality of their patients through improved drug therapy (Hepler & Strand, 1990). As a pharmacist, I am interested in the dramatic changes that are happening in the provision of pharmacy. Pharmacists now are not only responsible for dispensing and educating patients but also provide patient centred care where they assess the appropriateness of medication therapy, ensure patients have an understanding of their drug therapy, encourage adherence to medications, and monitor patient outcomes. Through patient-centred care, pharmacists have a tremendous opportunity to provide expanded access to care and improvements to health outcomes. This change in pharmacy practice has been applied in varying degrees to different pharmacy practice settings and many organizations and colleges throughout the world have begun the process of engaging pharmacists in patient-centred care.

Patient centred communication involves identifying and responding to patients' ideas and emotions regarding their illness and reaching common ground about the illness, its treatment, and the roles that pharmacist and patient will assume (Epstein, 2000). During patient-centred

practice, a pharmacist collaborates with a patient to develop an individualized care plan (Chewning & Sleath, 1996; Ramalho de Oliveira, Brummel, & Miller, 2010; Shah & Chewning, 2006). Patient-centred practice has many benefits such as increased patient satisfaction, treatment adherence, improved medical outcomes, and decreased number of malpractice claims (Safran et al., 1998; Williams, Weinman, & Dale, 1998; Williams et al., 1998; Kaplan, Greenfield, & Ware, 1989; Rao, Weinberger, & Kroenke, 2000; Stewart, 1995; Levinson, Roter, Mullooly, Dull, & Frankel, 1997).

After exploring the advantages and challenges of patient-centred care models in pharmacy practice, I asked myself "what is essential for patient-centred care?" I found that efficient, motivating, and purposive communication is an essential tool to deliver patient- centred care. This finding made sense to me because patient-centred practice prepares patients to play an active role in managing their own health and this requires a pharmacist to have good communication skills. In the next step of my investigation, I wanted to explore the real experience of pharmacist-patient interaction, and my interest in this objective formed the main ideas of my first manuscript. I found that patient-pharmacist interactions have been studied by several methods such as self-reporting surveys, non-participant observation, interviews, shopper marketing studies, and audio and video recordings. Since I wanted to investigate pharmacist-patient interactions, I started my tentative search by looking into advantages of recorded patient-pharmacist interactions. "Examining patient-pharmacist communication as an interpersonal dyadic interaction may help us understand collaborative problem-solving activities, and interpersonal relationship development within the context of mutual trust, rapport, and familiarity between the participants" (Shah & Chewning, 2006, p. 169). In addition, there are other advantages of using recorded conversations. First, the density of data obtained from these

recordings are greater than other types of data, which allows the researcher to study all the verbal and/or nonverbal behaviours of the participants (Morse, 1995). The second advantage to this kind of data collection is permanence. The researchers can view the data as often as necessary in a variety of ways (e.g., real time, slow motion, frame by frame, forward, backward) (Morse, 1995). Furthermore, the researchers can investigate different features of what is happening. Having several recorded conversations will provide a good opportunity to compare and contrast the data. The data can also be used for replication or for secondary analysis that addresses entirely different questions (Morse, 1995).

My first manuscript is a systematic review that describes the extent of biomedical vs. patient-centred communication in published studies using recorded patient-pharmacist interactions. This review aimed to characterize the 1) focus of research questions, 2) study design, 3) data analysis methods, 4) main findings, and 5) presence of patient-centred versus biomedical models of interaction in recorded patient-pharmacist interactions with attention to the influence of the research tradition. This meta-narrative review improved my knowledge about how patient-pharmacist interactions have been conceptualized differently and conducted by many different researchers. I was able to determine and characterize my areas of interest in patient-pharmacist interactions.

At the time I was working on my review, I submitted an abstract to the International Conference on Communication in Healthcare (ICCH) and it was accepted for poster presentation (Murad & Guirguis, 2013). The poster session presented at this conference in Montreal, Canada represented the analysis of my pilot study. In this pilot study, I analyzed the already collected audio recordings of patient-pharmacist interactions from 8 different community pharmacies in the Edmonton area. I used convergent parallel mixed-methods design to look at patient-

pharmacist dyads and to describe the content and main themes in the process of patient-pharmacist interactions. My supervisor, Dr. Lisa Guirguis, and I used an interpretive description approach that focused on "how" pharmacists are currently counselling their patients, and "how" patients are responding to them. The main findings of the meta-narrative review and the themes that resulted from the pilot study inspired me with more questions. Our pilot study provided valuable results about how pharmacists and patients perceived their roles. Our patients trusted their pharmacists as drug therapy experts and showed a high satisfaction rate with pharmacists' services. Pharmacists scored high on the counselor role orientation surveys (Schommer & Wiederholt, 1994), meaning that they had high expectations about their roles and qualifications as drug therapy experts. However, we found interesting instances of patients' resistance to pharmacists' advice and pharmacists missed patients' cues. Therefore, exploring the process of patient counselling, not only the content, can provide more information on what affects patient-pharmacist encounters and why the encounter proceeded in such a way. I was interested in the interaction between patients and pharmacists during the counselling process and how the pharmacist and patient affect, and are affected, by each other. If pharmacists encourage patients to have an active role during the interactions, what challenges may pharmacists confront? I was not only interested in the information provided by pharmacists during their interactions with their patients, but also in how the message was delivered. As a pharmacist and as a researcher, I wanted a further explanation of the responses we received from patients and what affected those responses. I found my last piece of this puzzle when Dr. Judith Spiers introduced me to Face-Work Theory.

Next, I presented at the Advances in Qualitative Methods Conference (AQM, 2013) (Murad, Spiers, & Guirguis, 2013). In this presentation, I explained the tenets of face-work

theory and the methodological implications for its use to explore how and why interactions progress as they do in pharmacy practice. In chapter three, my second paper described the implication of using Face-Work Theory to understand the nature of interpersonal interactions in patient-pharmacist encounters. In the second manuscript, I explain how maintaining face or the public social image one claims in social interactions is a fundamental but poorly understood dimension of interpersonal interaction. Maintaining face refers to protecting and enhancing our own and others' sense of competence, self-esteem, autonomy, and fellowship in relationships. It is communicated and negotiated through verbal and non-verbal language as people interact. Maintaining face generally occurs at a sub-conscious level. Understanding the work involved in face offers a unique way of understanding the process, the outcomes of pharmacist-patient interactions and how a pharmacist develops patient-centred communication skills.

In the fourth chapter, I applied Face-Work Theory to analyze audio-recorded community pharmacist-patient interactions. The third manuscript in my thesis was an exploratory descriptive study that draws upon principles of descriptive ethology. My study explored the actual interaction and the communicative practices of both the patient and the pharmacist in community pharmacy settings. The study questions were: (1) What are the main activities of community pharmacists? (2) What interactional contexts appear to contain face implications? (3) What are the types of face needs and face threats are implicated in these contexts?

Ethology is defined as "a method of systematically observing, analyzing, and describing behaviours within the context in which they occur" (Morse, 1995). Ethology was first used to explain animal behaviours. After that, it was used in comparative psychology to examine infant behaviour (Jones, 1972) and in cross-cultural studies of facial expression (Ekman & Friesen, 1971). This method has advantages for exploring behaviours in the cognitively impaired, the

elderly, newborns, and psychiatric patients. For example, it has been used to examine pain responses of postoperative neonates (Côté, Morse, & James, 1991), the touching behaviours of nurses comforting postoperative neonates (Solberg & Morse, 1991), and a nurse's use of touch with oncology patients in pain (Morse, Bottorff, & Hutchinson, 1994). It has also been used to explore nurse-patient communication and interactions. Using ethology in research is evolving, not only for health sciences, but for other disciplines as well. Ethology employs quantitative or qualitative methods depending on the research questions.

Ethology begins with an inductive descriptive phase. This phase helps the researchers to identify and describe important segments and patterns in behaviour. As the researchers watch or listen to the recorded interaction, they have to answer questions such as "What is going on here," "How does this behavioural response or interaction differ from another," and "What are the characteristics of this type of response." Using ethology as an analyzing method in face-work theory is recommended to interpret the behaviours within the context in which they occur and to examine verbal and non-verbal interactions and to look at the whole speech act and communication strategies.

The final chapter provided an overview of the main findings of the three manuscripts and how these results formed the bases for future directions in pharmacy practice research.

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Chapter Two

A Meta-narrative Review of Recorded Patient-Pharmacist Interactions: Exploring Biomedical or Patient-Centred Communication?[1]

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Abstract

Background: Pharmacists worldwide require improved patient centred communication skills as they transition from a dispensing role to enhanced involvement in patient care. Researchers have studied pharmacist communication through audio and video recordings of patient-pharmacist encounters. A meta-narrative review of research using these recordings will offer insight into the extent of biomedical versus patient-centred communication in patient-pharmacist exchanges.

Objectives: This review aims to characterize research on patient-pharmacists interactions using audio or video recordings and explore the 1) focus of research questions, 2) study design, 3) data analysis methods, 4) main findings and 5) presence of patient-centred versus biomedical models of interaction.

Methods: Drawing on the principles of meta-narrative systematic review, a literature search was performed to identify studies published in English. No publication date limits were implemented. Key search terms included: "audio recording", "video recording", "communication", "patient counselling", "patient interaction", "discourse analysis", "conversation analysis", "narrative analysis", and "content analysis". The search was conducted in five databases: Medline, Embase, International Pharmaceutical Abstracts (IPA), Web of Science, and Academic Search Complete.

Results: Forty-one articles met the inclusion criteria and represent 32 unique collections of patient-pharmacist recordings. The 23 quantitative studies focused on the "what" was in the interaction, whereas the 5 qualitative studies characterized specialized pharmacy practice and 13 studies used conversational analysis to describe "how" patients and pharmacists interact. The

majority of research described the content of recorded interactions in community pharmacies. Twenty-three studies presented evidence of a biomedical model, whereas 8 studies characterized a patient-centred focus.

Conclusions: A developing body of research used recordings to describe the content of patient-pharmacist communication and explore the quality of the interactions, validation of coding tools, impact of an intervention, and patient-pharmacist power asymmetry. Study findings, particularly the identification of biomedical vs. patient-centred communication, were guided by the quantitative, qualitative, or conversational analysis research paradigm.

2.1. Introduction

Evidence demonstrates that pharmacists' care enhances patient health (Kimberlin, Jamison, Linden, & Winterstein, 2011). Pharmacy practice worldwide is evolving from dispensing and educating patients to providing patient centred care where pharmacists assess the appropriateness of medication therapy, ensure patients have an understanding of their drug therapy, encourage adherence to medications, and monitor patient outcomes (Babinec, Rock, Lorenzetti, & Johnson, 2010). In the pharmacy literature, patient – pharmacist communication has been conceptualized as a transmission action or a transaction (Shah & Chewning, 2006). Transmission is a one-way process from sender to receiver. Biomedical communication usually follows a transmission model where the pharmacist concentrates mainly on providing medication-related information. The transaction model is a two-way process, where shared meaning is negotiated between two participants such as in patient-centred communication where the pharmacist identifies and responds to patients' ideas and emotions regarding their illness (Shah & Chewning, 2006).

The main difference between the patient-centred and biomedical models is the level of patient engagement (Chewning, 1997). The biomedical model enhances the control and status of the pharmacist, whereas the patient-centred model enhances the control and status of the patient. During biomedical communication, the pharmacist focuses on the treatment of the disease with little attention given to the role of psychological or social influence (Swenson, Zettler, & Lo, 2006). In the patient-centred model, the patient collaborates with the pharmacist to: 1) identify treatment goals; 2) choose from regimen options; 3) monitor symptoms and evaluate regimens; and 4) revise regimens if problems occur (Chewning & Sleath, 1996). In the patient-centred model, the pharmacist works directly with a patient and in conjunction with other practitioners to

take responsibility for achieving the optimized outcomes of drug therapy (Shoemaker, Ramalho de Oliveira, Alves, & Ekstrand, 2011). It involves the development of an individualized care plan to achieve the intended goals of therapy with appropriate follow-up to determine patient outcomes (Ramalho de Oliveira et al., 2010). Several studies have found an association between patient-centred communication and increased patient satisfaction, treatment adherence, improved medical outcomes, and decreased number of malpractice claims (Kaplan et al., 1989; Levinson et al., 1997; Rao et al., 2000; Safran et al., 1998; M. A. Stewart, 1995; Williams et al., 1998).

To transition to patient centred care, pharmacists require strong communication skills (Berger, 2009). Two recent review articles have examined patient-pharmacist communications. Shah & Chewning (2006) found that research has focused on one-way communication from the pharmacist to the patient. Puspitasari, Aslani, & Krass (2009) took an international perspective and found pharmacist counselling rates vary worldwide from 8% to 100% with more counselling for new rather than refill prescriptions. Pharmacists more routinely provided information on directions for use, dose, medication name, and indications than on side effects, adverse events, and storage (Puspitasari et al., 2009). Both studies reported diverse research methods with a focus on self-report surveys, non-participant observation, interviews, and shopper studies that were cross-sectional in nature. These studies frequently focused on the pharmacist, and did not capture actual patient-pharmacist interactions. Shah and Chewing reported only one audio-analysis that was conducted by Blom, Jonkers, Kok, & Bakker (1998). Puspitasari et al (2009) mentioned the same research in addition to a study by Evans and John (1995) and Livingstone (1996).

An analysis of patient – pharmacist recordings would allow for detailed study of patient-centred care. Audio or video recordings of patient-pharmacist interactions can capture the detail

of what happens in real interactions between patients and pharmacists, how these interactions transpire, and provide evidence as to why communication occurs(Pilnick, 1998b). Standardized questionnaires and interviews test hypotheses by measuring pre-specified constructs. Respondents construct a belief or attitude that may vary in differing situations(Stone et al., 2000). Qualitative interviews allow for greater exploration, but as with structured surveys, rely on recall of events. Observational research with simulated patients (e.g., pseudo-patients, secret shoppers) or pharmacy observations have an important role in determining "what" happens in a patient-pharmacist interaction whether it is the implementation of a new technique or content of pharmacists' advice (Mesquita et al., 2010). Mesquita et al. (2010) recently found that pharmacy research using simulated patients did not define and therefore could not measure patient-pharmacist communication skills or competencies. Patient-pharmacist audio recordings allow for unique study of how or why patient -pharmacist interactions take place; this research is not possible with other methods. "Examining patient-pharmacist communication as an interpersonal dyadic interaction may help us understand collaborative problem-solving activities, and interpersonal relationship development within the context of mutual trust, rapport, and familiarity between the participants." (Shah & Chewning, 2006, p. 169)

We were aware of an emerging body of research that used recordings of patient-pharmacist interactions as a data collection method and wanted to determine how this research technique has been employed in pharmacy practice research. The analysis of recordings uses a variety of methods from quantitative coding of the interaction, qualitative inductive methods, and discourse analysis (Pilnick, 1998b). Discourse analysis is a methodological approach that is often used in the study of communication in health care consultations. It involves the study of spoken and written language and how language use reflects social order and individuals' interactions

within society (Ylanne & John, 2008). This technique focuses on turn-taking, repair of conversation breakdown, topic management and non-verbal behaviours. The analysis approach and resulting findings may characterize patient-pharmacist communication as biomedical or patient-centred. We used an adaptation of the meta-narrative review, which is a coherent body of work that shares a common set of concept, theories, methods and instrument, to present our results (Wong, Greenhalgh, Westhorp, Buckingham, & Pawson, 2013). Meta-narrative reviews are best suited to study topic areas where existing studies have been conceptualized differently and/or conducted by many different researchers. The research using recordings from pharmacy practice arises from quantitative, qualitative and discourse analysis traditions which influences how research has been conceptualized and designed, and therefore also the key findings that result. This review aims to characterize the 1) focus of research questions, 2) study design, 3) data analysis methods, 4) main findings, and 5) presence of patient-centred versus biomedical models of interaction in recorded patient-pharmacist interactions with attention to the influence of the research tradition.

2.2. Methods

2.2.1. Data Sources

A literature search was performed by a medical librarian to identify studies published in English. No publication date limits were implemented. Searches were conducted in the following databases: Ovid Medline, Ovid Embase, International Pharmaceutical Abstracts (IPA), Web of Science, and Academic Search Complete. Two different approaches were used to identify relevant studies: search terms related to patient-pharmacist encounters (such as “patient counselling” and “patient interaction”) were combined with either search terms related to the

medium of collection (i.e., audio or video recordings), or to search terms about the method of data analysis (e.g., "discourse analysis", "conversation analysis", "narrative analysis", "content analysis," etc.). We added keywords about the methods of data analysis to include several articles that were founded in cited references and not on the first electronic search. In addition, reference lists of included articles where reviewed to identify additional relevant studies. The search results are shown in (Figure 1).

2.2.2. Study Selection

Two authors identified citations by screening titles and abstracts for potential relevance. The full text article for each potentially relevant citation was obtained for further evaluation. Studies were eligible for inclusion if they examined patient-pharmacist interactions using audio or video recordings, were published in English as a peer-reviewed full-text article, and used real patients or simulated patients. We excluded papers that used pharmacy students and interns or used audio or video materials solely for teaching purposes. The full text articles were examined to determine eligibility for inclusion; any discrepancies regarding inclusion were resolved by discussion. One author extracted details on research question, method, analysis, and main findings and a second author verified extraction. In the next section, we will outline how we characterized if the included studies showed evidence(s) of patient-centred or biomedical communication.

2.2.3. Defining Patient-Centred vs. Biomedical Model

We defined the studies as patient-centred if the study specifically stated it measured patient-centredness or if the pharmacists applied several elements of patient-centredness during their consultations with patients such as: incorporating the patient perspective into treatment

discussion, active listening, asking open-ended questions, and verifying patient understanding (Montgomery et al., 2010; Watermeyer & Penn, 2009a; Watermeyer, 2011; Watermeyer & Penn, 2009b). Articles representing the biomedical communication model lacked patient centred elements or exhibited pharmacists dominating the interactions with patients playing a passive role. These studies often concentrated on the content of counselling.

2. 3. Results

The search identified 586 studies. Of these articles, 162 were duplicates and an additional 383 articles were excluded after independent assessment by the two authors. Authors agreed on the allocation of all articles therefore 41 articles met the inclusion criteria. These represent 32 unique collections of recordings. One study was published in the 1980s, 10 in the 1990s, 22 after 2000, and eight after 2010. The research was predominately published in the quantitative research paradigm (20 studies; Table 2.1) followed by qualitative research (5 studies; Table 2.2) and discourse analysis (13 studies; Table 2.3). The remaining three studies (Table 2.4) used expert groups to develop criteria for the quality of patient pharmacist interactions (2 studies) or a mixed method approach (1 study). The following sections discuss the research questions, study designs, data analysis, and findings as conceptualized in each research tradition.

2.3.1. Research Questions

The research questions were driven by the research method. The quantitative research questions (Table 2.1) can be categorized as 10 studies focusing on the content of the interaction, (Bissell, Ward, & Noyce, 1997; Blom et al., 1998; Cavaco & Romano, 2010; Deschamps, Dyck, & Taylor, 2003; Evans & John, 1995; Flynn, Barker, Berger, Lloyd, & Brackett, 2009; F. Smith, 1992; F. J. Smith, Salkind, & Jolly, 1990; F. J. Smith, 1993), four on evaluating the quality of

interactions with a validated tool (Greenwood, Howe, & Holland, 2006) or to validate a tool, (McMillan, Cameron, & Power, 2011; Smith et al., 1990; Stewart et al., 2010) two on patient recall (Evans, John, Bloor, & Luscombe, 1997; Wilson, Robinson, Ellis, Blenkinsopp, & Panton, 1989) two that test a hypothesis (Bentley, Stroup, Wilkin, & Bouldin, 2005; Paluck, Green, Frankish, Fielding, & Haverkamp, 2003) one to evaluate an intervention (Sigrist, Benrimoj, Hersberger, & Langford, 2002), and one on validating the quality of stimulated patient recall (Werner & Benrimoj, 2008). The five qualitative studies explored pharmacists in new roles (Chen & Britten, 2000; Leontowitsch, Stevenson, Nazareth, & Duggan, 2005; Montgomery et al., 2010), maintenance of professional expertise (Stevenson, Leontowitsch, & Duggan, 2008) and communication breakdown (Babalola & Erhun, 2001).

The research in discourse analysis asks one of two primary questions regarding either the structure of patient-pharmacist communication or the exploration of phenomena including acceptance of advice (Salter, Holland, Harvey, & Henwood, 2007) conflict talk (Nguyen, 2011), patient expertise (Pilnick, 1998a), compliance paradigm (Salter, 2010), effective strategies for verifying understanding (Watermeyer & Penn, 2009a), and the role of assistants (Ylanne & John, 2008). In all paradigms, six studies used theory explicitly to guide the exploration of patient-pharmacist communication. The quantitative studies focused on the "what", the qualitative studies explored new or specific roles, and the conversational analysis focused on the "how" patients and pharmacists interact.

2.3.2. Design and Methods

Researchers used video recordings in nine studies (Babalola & Erhun, 2001; Bentley et al., 2005; Deschamps et al., 2003; Dyck, Deschamps, & Taylor, 2005; Flynn et al., 2009; Hargie,

Morrow, & Woodman, 2000; McMillan et al., 2011; Nguyen, 2011; Stewart et al., 2010) and audio recordings in the remaining 32 studies to collect patient-pharmacist interactions. In the qualitative (Babalola & Erhun, 2001) and discourse analysis research (Dyck et al., 2005; Nguyen, 2011; Watermeyer & Penn, 2009a; Watermeyer, 2011; Watermeyer & Penn, 2009b) videos were transcribed for analysis; thus video did not appear to add to the analysis. In the quantitative studies, three studies coded elements only available in video (Bentley et al., 2005; McMillan et al., 2011; Stewart et al., 2010) while two examined content (Deschamps et al., 2003; Flynn et al., 2009). Simulated patients in university practice laboratories or community pharmacies were employed in four articles. In seven articles audio recordings were collected in hospitals (Babalola & Erhun, 2001; Chen & Britten, 2000; Pilnick, 1999; Pilnick, 2001), five in patients' homes (Chen & Britten, 2000; Greenwood et al., 2006; Nguyen, 2011; Salter, 2010; Salter et al., 2007), and the remaining research studies were conducted in community pharmacies. No clear pattern emerged between research paradigm and research location. The discourse research was most likely two have multiple analyses conducted on one dataset (Table 2.3). One dataset was used in both a quantitative (Deschamps et al., 2003) and discourse analysis study (Dyck et al., 2005). Ten studies combined two or three data collections methods such as: questionnaires, non-participant observations and interviews. Multiple methods of data collection were most prevalent in the qualitative paradigm (Babalola & Erhun, 2001; Leontowitsch et al., 2005; Montgomery et al., 2010; Stevenson et al., 2008). We did not identify any longitudinal studies. The single intervention study found that health belief model and use of open-ended questions improved the content and quality of patient interactions (Sigrist et al., 2002). The bulk of this research has been conducted in the United Kingdom followed by the United States of America.

Consent procedures were outlined in the majority of studies, but 10 out of 41 studies (i.e., 7 datasets) did not report consent procedures or approval from an ethics review committee (Bissell et al., 1997; Chen & Britten, 2000; Flynn et al., 2009; McMillan et al., 2011; Montgomery et al., 2010; Pilnick, 1998a; Pilnick, 1999; Pilnick, 2001; Pilnick, 2003). One study reported ethical approval, but not consent procedures (Stevenson et al., 2008). Nine of the studies posted a sign to inform the patients of the recording, assuring them of anonymity and confidentiality with five studies using this as the sole form of consent (Bissell et al., 1997; Hargie et al., 2000; Smith et al., 1990; Smith, 1993; Wilson et al., 1989). Oral consent was solely obtained in three studies (Cavaco & Romano, 2010; Leontowitsch et al., 2005; Paluck et al., 2003) and oral consent was combined with a sign in one study (Garner & Watson, 2007). The remaining studies used a written consent in combination with oral consent and signs.

2.3.3. Data Analysis

Quantitative methods dominated (Table 2.1) followed by discourse analysis (Table 2.3). All studies in the discourse analysis and qualitative paradigms analysed transcripts whereas 10 quantitative studies (Table 2.1) conducted their analysis on the audio itself by characterizing the content (Flynn et al., 2009; Wilson et al., 1989) or by employing a scoring tool (Bentley et al., 2005; Blom et al., 1998; McMillan et al., 2011; Paluck et al., 2003; Sigrist et al., 2002; Smith et al., 1990; Stewart et al., 2010; Werner & Benrimoj, 2008). Studies using a quantitative paradigm quantified the frequency of encounter reason, content of oral drug information, oral drug information received, and pharmacists' and patients' behaviour at the counter. Furthermore, the number, type, and content of questions asked by pharmacists were reported. Validated tools were used to analyze data in several studies (Cavaco & Romano, 2010; Deschamps et al., 2003; Greenhill, Anderson, Avery, & Pilnick, 2011; Greenwood et al., 2006), while five authors

developed their own coding tools. All studies characterized elements of pharmacist communication, several also explicitly analysed patients' contribution to the interaction (Cavaco & Romano, 2010; Chen & Britten, 2000; Leontowitsch et al., 2005; Pilnick, 1998a; Salter, 2010; Salter et al., 2007; Stevenson et al., 2008) and two studies examined patient recall (Evans et al., 1997; Wilson et al., 1989).

2.3.4. Main Findings

Main findings were driven by the questions asked in each research paradigm. The quantitative studies characterized what happened between patients and pharmacists. Pharmacists' consultation focuses mainly on medications instruction (Blom et al., 1998; Deschamps et al., 2003; Livingstone, 1996; Smith, 1992; Wilson et al., 1989). Several studies quantified the number and type of questions asked by pharmacists and found that pharmacists asked more closed questions than open ones (Cavaco & Romano, 2010; Deschamps et al., 2003; Evans & John, 1995). A comparison showed that pharmacists provided more information and advice than technicians (Bissell et al., 1997; Blom et al., 1998). In addition, the percentage of what the patients recalled after counselling was calculated and found to be approximately a quarter of what the pharmacists said in one study (Evans et al., 1997) and half in the second study(Wilson et al., 1989). Patients mainly recalled instructions and repeated information (Evans et al., 1997; Wilson et al., 1989). Quantitative methodology was used to develop and test evaluation tools for pharmacists' consultations with patients (McMillan et al., 2011; Stewart et al., 2010) and to measure patient centredness (Greenwood et al., 2006). Better pharmacist communication quality and greater patient satisfaction resulted when patient centred skills were applied during counselling (Bentley et al., 2005; Paluck et al., 2003).

The qualitative paradigm provided rich descriptions of novel pharmacists' practice or areas. Specialized pharmacists' communication included patient engagement and acceptance (Chen & Britten, 2000; Leontowitsch et al., 2005; Montgomery et al., 2010). Pharmacists' expertise was important and not diminished by engaging patients in decision-making (Stevenson et al., 2008). Breakdown in patient-pharmacist communication was due to the pharmacist or pharmacy environment (Babalola & Erhun, 2001).

Discourse analysis reported how pharmacists communicate with patients. The structure of the interaction was primarily focused on the pharmacist providing medication information. Patients' expertise was disregarded by pharmacists (Salter et al., 2007) reduced pharmacists' expected dominance (Pilnick, 1998a), and led to patients disregarding advice(Salter et al., 2007) or inquires that threatened their competence (Salter, 2010). Pilnick found that conflict was resolved with referrals to physicians. Watermeyer & Penn (2009a) identified four ways to verify patient understanding (Table 2.3). Ylanne & John (2008) described three ways pharmacist assistants interact with patients (Table 2.3).

Several studies investigated the characteristics of pharmacists and/or patients that may influence the nature or extent of communication. Pilnick (1998a) found that patient expertise reduces the expected interactional dominance of the pharmacist. The quality of patient-pharmacist communication was affected by the environment and positively improved if pharmacists applied patient centred skills such as: patient involvement, listening, and integrating patients' perception (Babalola & Erhun, 2001; Bentley et al., 2005; Evans & John, 1995; Hargie et al., 2000; Paluck et al., 2003).

2.3.5. Presence of Patient-centred vs. Biomedical Communication

The research paradigm with its resulting question and measurement model had an impact on whether or not patient-centred or biomedical communication was characterized. Eight studies found evidence of a patient-centred model in patient-pharmacist interaction, whereas 23 patient-pharmacist interactions exhibited a biomedical focus. Patient centred communication primarily took place in specialty clinics and by pharmacists with additional training or a specific clinical focus (Chen & Britten, 2000; Greenwood et al., 2006; Leontowitsch et al., 2005; Montgomery et al., 2010; Watermeyer & Penn, 2009a; Watermeyer, 2011; Watermeyer & Penn, 2009b). The community-based pharmacy study that identified patient centred behaviours used pharmacists to characterize effective communication performances (Hargie et al., 2000).

Quantitative studies focused on the clinical content resulting in a focus on biomedical communication. If patient centred communication was present it was not quantified with the exception of Greenwood, Howe, and Holland (2006) who used validated scales with the specific intent of characterizing patient centred communication. Qualitative research, which studied specialized pharmacists, found patient centred communication (Chen & Britten, 2000; Leontowitsch et al., 2005; Montgomery et al., 2010). Other topic questions on communication breakdown(Babalola & Erhun, 2001) and pharmacists expertise (Stevenson et al., 2008) led to a focus on biomedical communication. Discourse analysis described eight studies with a biomedical and three with patient centred communication style. The patient centred communication style was found in a specialty clinic and these studies described how pharmacists counsel patients about their antiretroviral medications (Watermeyer & Penn, 2009a; Watermeyer, 2011; Watermeyer & Penn, 2009b).

2.4. Discussion

Forty-one studies were identified that analyzed video and audio recordings of pharmacist-patient interactions. A greater number of articles were found than were identified in prior reviews (Chewning, 1997; Puspitasari et al., 2009) because additional keywords were included such as discourse, conversation, narrative, and content analysis and the search was conducted in both sociological and health sciences literature databases. Research on recordings of patient-pharmacist interactions reside within multiple research fields with distinct traditions within pharmacy as well as sociology and linguistics.

The majority of studies were published in the last ten years, suggesting a growing interest in patient-pharmacist communication. The vast majority of the research was conducted using audio recordings in community pharmacies and was descriptive in nature. Consent procedure was described in the majority of studies with a majority using written consent. The five studies that used a pharmacy sign as the sole means to alert patients occurred in 2000 and earlier. Few studies used simulated patients during data collection. Only three of the 10 studies that employed videos analysed non-verbal behaviour. Transcripts of recorded patient-pharmacist interactions were used in the analysis process in both qualitative and discourse methodologies. Half of the quantitative studies analyzed the transcripts and the remaining quantified the content directly from the recording with scoring tools. In most of the studies, results were analyzed quantitatively while discourse analysis and qualitative methods were employed in the remaining articles.

Much of the literature covered in this review suggests, (1) that the evidence of biomedical vs. patient-centred models in the studies' findings depends on the research questions and analysis methods; (2) the majority of studies using a biomedical approach looked at the content of patient

counselling and quantified their findings; (3) eight studies found pharmacists only two applied several elements of patient-centredness during their consultations with patients. These results also resonate with the views of several papers that recognise the need for closer attention to patient-centred care in current-day pharmacy (Berger, 2009; Hassell, Rogers, & Noyce, 2000; Rogers, Hassell, Noyce, & Harris, 1998; Rosenthal, Austin, & Tsuyuki, 2010). One of the included studies showed that patients reported a high level of satisfaction when the pharmacists adapted their own model of concordance (Leontowitsch et al., 2005). However, the results also conflict with the previous finding in the medical literature that while the vast majority of patients prefer the patient-centred approach, a significant proportion still prefers a biomedical communication model (Swenson et al., 2004). No single demographic or clinical characteristic reliably predicts patients' communication style preferences (Savage & Armstrong, 1990; Swenson et al., 2004), and prior research shows that pharmacists are often unaware of what patients expect and evaluate as being important when they visit the pharmacy (Assa-Eley & Kimberlin, 2005; Worley et al., 2007). Kaae, Traulsen, & Nørgaard (2011) have shown that pharmacists' use of one well-intended question may trigger different patient responses. Patients' variation in responses may be due to of their personal interpretation of the suggested relationship (Kaae et al., 2011) or health beliefs (Partridge & Hill, 2000).

Furthermore, our findings show that patient-pharmacist interactions are not consistently analyzed as a dyad. Since patients and pharmacists individually determine the quality of their interactions, it is important to incorporate both parties' prior experiences (Shah & Chewning, 2006). A very limited number of studies in this review described how the quality of patient-pharmacist interactions is positively affected with pharmacists' centred care skills. This review described the studies that analyze recorded patient-pharmacist interaction and it shows that audio

and video recording methodology allows researchers to draw conclusions about the real-time effects of interaction between patients and pharmacists (Pilnick, 1998b). However, recordings can create an artificial environment, as pharmacist and patient are aware that they are being recorded due to the consent procedures. This causes a behavioural change, the so-called 'Hawthorne effect'. Some studies recorded patient-pharmacist interactions in the absence of a researcher in order to decrease the 'Hawthorne effect' (Bissell et al., 1997; Bissell, Ward, & Noyce, 2000; Montgomery et al., 2010; Salter, 2010).

Few studies used simulated patients in their research. We identified only three data sets and four studies that used simulated patients. Two used real pharmacists in a lab where the pharmacist was aware of the interaction (Deschamps et al., 2003; Dyck et al., 2005) and two were recorded in the community pharmacy setting where pharmacists were unaware of simulated patients but were informed that a visit would come within a designated timeframe (Sigrist et al., 2002; Werner & Benrimoj, 2008). Using simulated patients can enhance the reliability and validity of the data (Mesquita et al., 2010) and allow for comparisons between pharmacist responses to the same patient query. Simulated patients can judge the performance of the pharmacist in a reliable way. Finally, the simulated patient has increased face validity if the pharmacist does not know or suspect the presence of a simulated patient.

Few studies used more than one method of data collection but two studies used both quantitative and qualitative analysis methods. Mixed methods data collection and analysis may provide more thorough and insightful findings (Creswell & Plano Clark, 2011). Several studies employed qualitative methods of data collection (e.g. interviews) and also presented qualitative data (such as verbal data rather that numerical data). Using qualitative methods in pharmacy communication research is important for understanding social situations from the viewpoint of

all parties involved. Non-specific thematic analysis was the predominant analysis approach. One study used an interpretive approach whereby the researchers developed a sense of the whole dataset before generating impressions of the individual parts.

In several studies data was analyzed using discourse analysis. In these studies, this method is described as qualitative. However, discourse analysis can be both a quantitative and qualitative method (Lazaraton, 2002). Discourse analysis resulted in rich descriptions of patient-pharmacist interactions and contributed to new understandings of how patients and pharmacists manage conflict, power, and expertise when communicating about medication. The questions and thick analysis resulting from discourse analysis may not directly lend themselves to practice enhancements, but may guide the understanding of existing communication practices.

2.5. Strengths and Limitations

Possible limitations include not searching for dissertations or unpublished work and the restriction to only English language articles. The data is widely varied and not sufficiently mature to allow for definite conclusions. There are several points of strength in our review. It is based on a literature search conducted in several databases in both the health and social sciences. A detailed description of research questions, methods, analyses and findings is presented. This is the first review to discuss this number of studies that collected and analyzed audio and video recordings of patient- pharmacist interactions.

2.6. Research Directions

The diversity of this body of research could lead in many directions. First, researchers should carefully match the research objective, method of recording, and research methodology. There are few pharmacy specific validated coding tools that would help quantify pharmacists'

and patients' communication. Simulated recall of information presented in patient-pharmacist interactions may provide rigorous evaluation of patients and pharmacists' perceptions of biomedical vs. patient-centred communication. Future research using discourse analysis may consider investigating the structure of exchange between the patient-pharmacist dyad as well as characterizing structural differences in communication in differing contexts (e.g. new vs. refill prescriptions). It would be helpful for the profession, patients, and researchers to understand how pharmacists and patients organized the interviews and how this may have influenced patients' medication taking behaviours. It is not known how pharmacists determine patients' communication preferences and subsequently adjusts their communication styles according to patient preference. As the structure of patient-pharmacist interactions is uncovered, it will be important to link pharmacists' communication to patient health outcomes.

2.7. Conclusion

There is a developing body of research using audio and video recordings to describe the content of pharmacists' communication in addition to exploring the quality of the interactions, validation of coding tools, the impact of an intervention, and an enhanced understanding of the patient-pharmacist power asymmetry. Evidence for biomedical vs. patient-centred models in the studies' findings depends on the nature of the research questions and analysis methods. The quantitative studies focused on the "what", the qualitative studies explored new or specific roles, and the discourse analysis focused on the "how" patients and pharmacists interact. Future research should focus on how pharmacists partner with patients to apply patient-centred care in differing contexts and explore the links between communication and patient health outcomes.

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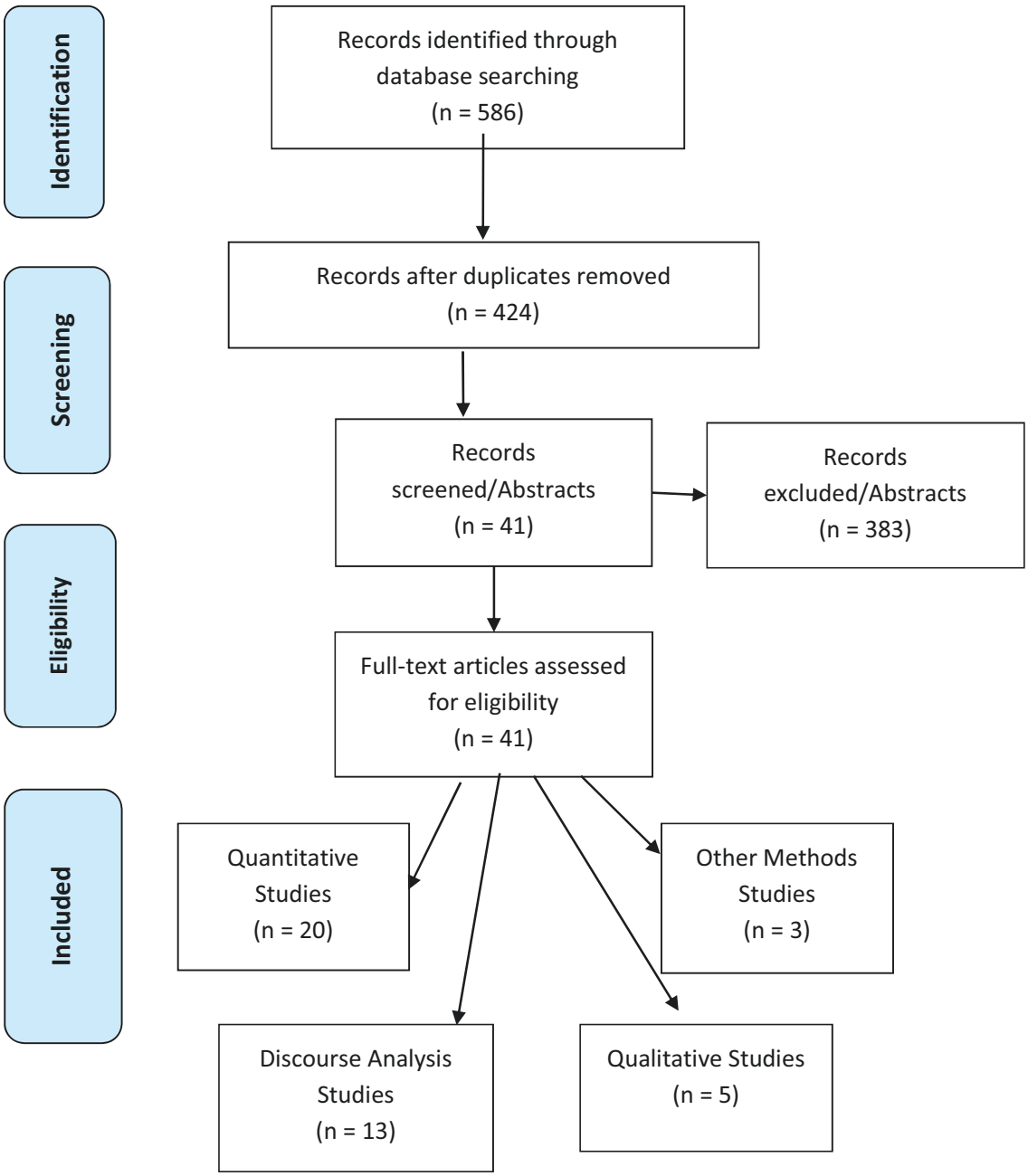

Figure 2.1: Search Results

Table 2.1: Quantitative Studies

Author/Year Reference No.	Research Questions	Method	Analysis	Main Findings	Biomedical/Patient-Centred Communication
Bentley et al (2005)	To determine whether pharmacists' appearance and communication impact patient evaluations (satisfaction, service quality, trust and future intention).	Online Video: Videos of patient-pharmacist interactions were viewed. Observers completed an online survey, USA.	179 video recordings were analyzed quantitatively.	A higher pharmacist communication performance (i.e., greater attentiveness, information, and patient involvement) was associated with higher pharmacist evaluations while dress or presence of white coat was not.	Biomedical
Bisell, Ward, and Noyce (1997)	To determine the variations in demand for, and response to pharmacy-only medicines requested.	Community pharmacies, UK. Audio recordings of pharmacists/medicine counter assistants-patients interactions. Non-participant observation.	The transcripts were analyzed quantitatively, n=427 requests.	Pharmacists were more likely to provide advice than a counter assistant. 70% of interactions did not involve a pharmacist. 10% solely involved a pharmacist. Rates of advice with medicine sales ranged from 17 to 97% in 10 pharmacies. Patient assessment was not consistent.	N/A

Table 2.1: Quantitative Studies

Blom et al (1998)	To identify the content of patient counselling.	Community pharmacies, Netherlands. Audio recording of patients-pharmacists/ technicians contacts.	6,784 recordings were analyzed quantitatively using a novel scoring system.	Pharmacists provided advice for 36% of prescriptions that was focused on drug instructions and not solicited. Pharmacists provided more oral information than technicians.	Biomedical
Cavaco and Romano (2010)	To describe pharmacist-customer communication during blood pressure and cholesterol services.	Community pharmacies, Portugal. Audio recording of patient-pharmacist interactions.	83 transcripts were analyzed quantitatively using a system adapted from Roter Method of Interaction Process Analysis (Roter, 2006)	The average of blood pressure and cholesterol counselling was 5:35 min and 7:05 min respectively. In both cases, pharmacists asked more questions (mainly closed ones), while patients gave more information.	Biomedical
Deschamps, Dyck, and Taylor (2003)	To describe content and organization of patient counselling.	Controlled university lab setting, Canada. Video recording of standardized patient-pharmacist interactions.	20 transcripts were quantitatively coded (scheme adapted from recognized medicine counselling guidelines).	Pharmacist provided: side effect information (100%), indication (100%), name of medicine (95%), and scheduling (95%). average duration = 3:20 minutes. Pharmacist asked an average of 8±4 close-ended and 1±1 open-ended questions.	Biomedical

Table 2.1: Quantitative Studies

Evans and John (1995)	To compare and contrast pharmacist medicine counselling in UK and USA.	Community pharmacies, UK &USA. Audio recordings of patient-pharmacist interactions.	123 (63 from UK and 60 from US) transcripts were analyzed quantitatively.	Pharmacists asked two questions per interaction and 95% were closed-ended. Mean counselling was 123 seconds in US and 69 in UK. Pharmacists provide 11.2 information items per interaction in US and 6.5 items in UK.	Biomedical
Evans et al (1997)	To identify if clients can recall information offered by pharmacists.	Community pharmacies, UK. Audio recordings of patient-pharmacist interactions and patients interviews.	98 transcripts of audio recordings and phone interviews were analyzed quantitatively.	Only 24% of information offered by pharmacists was later recalled by patients. Patients were more likely to recall procedural advice and repeated information.	Biomedical
Flynn et al (2009)	To evaluate the dispensing accuracy and counselling provided.	Community pharmacies, USA. Video recordings of patient-pharmacist interactions.	100 video recordings were analyzed quantitatively.	Of 100 prescriptions dispensed, 22% had dispensing error rate. A total of 43 shoppers (43%) received verbal counselling, including 16 cases in which the shopper prompted counselling.	N/A

Table 2.1: Quantitative Studies

Greenhill et al (2011)	To determine applicability of Calgary-Cambridge guide to pharmacy consults.	Community pharmacies, hospital and GP clinic, UK. Audio recorded of patient-pharmacist consults.	18 transcripts were analyzed quantitatively using Calgary-Cambridge guide.	Calgary-Cambridge guide can be applied with minor alterations to opening, agenda setting, question responses, and social talk. Pharmacists may require training on patient centred skills.	Biomedical
Greenwood, Howe, and Holland (2006)	To assess patient centredness and content of the consult using validated tools.	Patients' home, UK. Audio recordings of patient-pharmacist interactions.	18 transcripts were analyzed quantitatively: Henbest and Stewart Rating (assess patient centredness) and SEGUE scale. (Set the stage, Elicit information, Give information, Understand the patient's perspective, and End the encounter, a checklist of medical communicatio n tasks)	Scores were comparable to physicians in that they demonstrated high patient-centredness, and covered all appropriate areas. Both scales are suitable for pharmacist patient interactions.	Patient-Centred

Table 2.1: Quantitative Studies

Livingstone (1996)	To examine the nature of verbal interactions between elderly people and pharmacists.	Community pharmacies, UK. Audio recordings of interactions between elderly patients and pharmacists.	43 transcripts were analyzed quantitatively.	Pharmacists provided medicine information to 12.5% of elderly patients that focused on aspects of the dosage regimen. Mean interaction was 71 seconds.	Biomedical
McMillan,Cameron, & Power (2011)	To develop and test an evaluation tool for GP and pharmacist consults with patients.	Video recordings of GPs and pharmacists consult with patients. Scotland.	18 GPS and 12 pharmacists' video recordings were analyzed quantitatively.	Pharmacist tool omitted 2 examination questions. Tool could discriminate between GP but not pharmacist performance level.	N/A
Paluck (2003)	To determine predictors of the quality of patient-pharmacist communication.	Community pharmacies, Canada. Audio recordings of patient-pharmacist interactions.	765 interactions were quantitatively analyzed with a novel scale	Four of the variables predicted communication quality (pharmacists' attitude, year of graduation, adherence expectations, and outcome expectations).	N/A

Table 2.1: Quantitative Studies

Sigrist et al (2002)	To evaluate an intervention to improve patient interactions about non-prescription analgesics.	Community pharmacies, Switzerland. Audio recordings of pseudo-patient-pharmacy staff. Staff training workshop = 15 hours	14 Intervention pharmacies with 98 consults; 14 control pharmacies with 91 consults. Novel quantitative scoring.	The intervention improved the content and quality of the patient-pharmacist/staff interactions. Interactions for restricted medicines had the greatest improvement.	Biomedical
Smith, Salkind and Jally (1990)	To assess quality of primary health care advice given by pharmacists.	Community pharmacies, UK. Audio recordings of patient-pharmacist interactions.	50 audio recordings were quantitatively analyzed with a novel scale.	54% of consults achieved satisfactory scores on 75% of the nine characteristics while 25% were satisfactory on 2 or fewer characteristics.	Biomedical
Smith (1992)	To explore pharmacists communication focus and style relative to health promotion.	Same as above.	711 transcripts were analyzed quantitatively.	Pharmacists' advice focused on the products rather than symptoms. Pharmacists asked 3 questions focused on symptoms (79% closed) and promptly answered patient questions (97%).	Biomedical

Table 2.1: Quantitative Studies

Smith (1993)	To investigation the referral patterns of pharmacists.	Same as above.	108 of 716 transcripts had referrals and were analyzed quantitatively.	Pharmacists' referrals were determined by the symptoms presented. Most common referrals were conditional and direct to GP.	Biomedical
Stewart et al (2010)	To develop and validate tool to assess the quality of pharmacist prescriber's consults.	Community pharmacies, UK. Video recordings of patient-pharmacist interactions.	14 video recordings were analyzed quantitatively with a novel tool.	Pharmacists scored 3/5 overall on quality. Generated evidence for reliability and validity.	N/A
Werner and Benrimoj (2008)	To determine whether audio recordings can improve the reliability of data recalled by simulated patients.	Community pharmacies, Australia. Audio recordings of simulated patient-pharmacist consults.	1340 audio recordings were analyzed quantitatively using simulated patient tool.	Approximately 10% of interactions had discrepancies resulting in a 10%-20% change in the score from the manual data (a significant change).	N/A

Table 2.1: Quantitative Studies

Wilson et al (1989)	1. To identify the information and advice given by pharmacist 2. To test recall of information given by the pharmacist.	Two community pharmacies, UK. Audio recordings and observations of patient-pharmacist interactions. Interviews with patients.	1. 212 audio recordings were analyzed quantitatively. 2. 49 interviews were analyzed quantitatively.	1. The most frequent topics: general health topics, discussion of symptoms and treatment and discussing matters not covered during GP consultations. 2. 47% of patients omitted information. All recalled information was correct. Patients who participated received more information.	Biomedical

Table 2.2: Qualitative Studies

Author/Year Reference No	Research Questions	Method	Analysis*	Main Findings	Biomedical/Patient-Centred Communication
Babalola and Erhun (2001)	To identify areas of communication breakdown caused by pharmacist.	University teaching hospital, Nigeria. Audio, video recordings of medicine histories and questionnaire.	20 transcripts were qualitatively coded and analyzed using the socio-linguistic model.	Miscommunication occurred because of a noisy environment or the pharmacist used technical and vague statements, did not integrate patient perceptions, did not explain intent, or gave conflicting advice	Biomedical
Chen and Britten (2000)	To investigate feasibility of using primary care pharmacists as medicine counselors.	GP surgeries and patients' homes, UK. Audio recording of patient-pharmacist interactions.	25 transcripts were analyzed qualitatively.	The clinical pharmacists experienced few problems with the consults. Patients were willing to discuss their medicines in detail with pharmacists.	Patient-Centred

*Unless noted, qualitative studies use thematic analysis approach.

Table 2.2: Qualitative Studies

Leontowitsch et al (2005)	To describe feasibility and acceptability of concordance in pharmacy.	Community pharmacies, UK. Audio recording of patient-pharmacist consults. Observations and interviews with pharmacists and patients.	26 transcripts were analyzed qualitatively.	Pharmacists adapted their own model of concordance (i.e., open-ended exploration to understand and incorporate the patient perspective into treatment discussions). Customers reported a high level of satisfaction.	Patient-Centred
Montogomey et al (2010)	To describe the characteristics and content of pharmacists providing pharmaceutical care.	Community pharmacies, Swedan. Audio recordings of patient-pharmacist interactions. Non-participant observations.	16 transcripts with five pharmacists were analyzed qualitatively using interpretive approach.	Counselling behaviour was characterized by variable listening, asking questions, a willingness to help, use of computers, and identification of patient needs.	Patient-Centred
Stevenson, Leontowitsch, and Duggan (2008)	To explore how pharmacists maintain their professional expertise	Same as Leontowitsch 2005 above.	27 transcripts were analyzed qualitatively.	Engaging patients did not reduce the pharmacist expertise. Patient desired differing levels of engagement/expertise.	Biomedical

*Unless noted, qualitative studies use thematic analysis approach.

Table 2.3: Discourse Analysis Studies

Author/Year Reference No	Research Questions	Method	Analysis	Main Findings	Biomedical/Patient-Centred Communication
Salter et al (2007)	To what extent the advice given by pharmacists is acknowledged and accepted by patients.	Participants' home, UK. Patient-pharmacist medicine reviews were observed and recorded. Pharmacist and patient interviews.	29 transcripts were analyzed by discourse analysis.	Pharmacists usually offered advice and information in a didactic manner despite patient displays of competence. Advice was often resisted/rejected by patients.	Biomedical
Dyck, Dechamps, and Taylor (2005)	To determine number of adverse effects mentioned and how pharmacists articulated likelihood occurrence.	Controlled university lab setting, Canada. Video recording of standardised patient-pharmacist interactions.	20 transcripts were analyzed by conversation analysis.	Pharmacists discussed side effects and management strategies with an average of 4±2 unique side effects. Vague, verbal descriptors of frequency were used.	Biomedical
Garner and Watson (2007)	To study consults between medicines counters assistants (MCA) and customers for non-prescription medicine.	Community pharmacies, Scotland. Audio recordings of MCA-patient counselling.	168 transcripts were analyzed by discourse analysis.	Of 773 utterances, 61% were information eliciting, 13 % information giving, 14% advice giving and 11% other. Most frequently asked who is taking the medicine and other current medications.	Biomedical

Table 2.3: Discourse Analysis Studies

Nguyen (2011)	To examine multiparty conflict talk in a pharmacy consults.	Community pharmacies, USA. Video recordings of patient-pharmacist interactions.	1 transcript was analyzed with in-depth conversational analysis.	Conflict gradually occurred with indirect and reluctant communication. It was resolved with appeals to an outside third party (physician) and delicate alignment.	N/A
Pilnick (1998)	To determine the influence of patient expertise on the patient – pharmacist interaction.	Paediatric outpatient oncology clinic, UK. Audio-recording of patient/carer-pharmacist interactions.	43 transcripts were analyzed using conversation analysis/ethnography.	Patient expertise reduces the expected interactional dominance of the pharmacist. Patient and pharmacist dominance varies within an interaction.	Biomedical
Pilnick (1999)	To characterize patient-pharmacist counselling as instructing, advising or giving information.	Same as above.	45 transcripts were analyzed using conversation analysis.	Pharmacists instruct patients on medicine use rather than providing general information or personalized advice.	Biomedical

Table 2.3: Discourse Analysis Studies

Pilnick (2001)	To describe the structures of patient-pharmacist interaction.	Same as above.	Same as above.	Structure: Opening/greeting, approach and arrival at advice giving, acceptance/ rejection, delivery and response to information (assuming patient is not knowledgeable), close and exit.	Biomedical
Pilnick, A. (2003)	To examine how pharmacists initi ate advice giving.	Same as above.	Same as above.	4 approaches to advice giving: patient request, pharmacist gives information immediately, pharmacist offers or states intention, and step-wise approach to evaluate the situation first	Biomedical
Salter (2010)	To examine the influence of the compliance paradigm on medicine review.	Patient homes, UK. Audio recordings of patient-pharmacist interactions. Non-participant observation.	29 transcriptions were analyzed using discourse analysis.	Pharmacist led structures interactions which explore patients' ability to comply with medicines. Patients resisted inquiries that threatened their competence.	Biomedical
Watermeyer (2011)	To describe how pharmacists talk about antiretrovirals (ARVs) with patients.	Pharmacy in a public ARV Clinic, South Africa. Video recording of patient-pharmacist interactions.	26 transcripts were analyzed by conversation analysis.	Pharmacists discussed ARVs in three contexts: ARV for the rest of patient's life, to save patient's life and to feel better.	Patient-Centred

Table 2.3: Discourse Analysis Studies

Watermeyer and Penn (2009)	To identify the effective strategies for verifying patient understanding of ARV dosage instruction.	Same as above.	Same as above.	Strategies to verify patient understanding include asking for patient demonstration, using specific questions, asking if information was understood, and monitoring patients' verbal and non-verbal responses.	Patient-Centred
Watermeyer and Penn (2009)	To examine the structure of patient-pharmacist interactions.	Same as above.	Same as above.	Patient-pharmacist interactions had a clear structure that contained multiple cycles of delivery of instruction, patient response, and verification of understanding.	BPatient-Centred
Ylanne and John (2008)	To describe the role of medicine counter assistants (MCA) when dealing with patients.	Community pharmacies, UK. Audio recordings of patient-MCA/ pharmacists interactions.	29 transcripts were analyzed using discourse analysis.	MCA are involved in three ways: dealing solely with the patient, checking advice with the pharmacist while dealing with the patient, and keeping the patient ‘on hold’ until the pharmacist is ready for counselling.	N/A

Table 2.4: Other Methods

Author/Year Reference No	Research Questions	Method	Analysis	Main Findings	Biomedical/Patient -Centred Communication
Bissell, Ward, and Noyce (2000)	To identify the criteria to assess appropriateness of common ailments management.	Community pharmacies, UK. Audio recordings of patient-pharmacist interactions. Non-participant observation.	10 of 624 transcripts were used to assess the feasibility of a set of expert criteria.	Audio recordings provided the context for a stakeholder process on the development of guidelines for appropriateness.	N/A
Hargie, O. D. W., Morrow, N. C., & Woodman, C. (2000)	To identify what constituted effective communicative performance by pharmacists.	Community pharmacies, UK. Video recordings of patient-pharmacist interactions.	350 video recordings were analyzed qualitatively by pharmacists, and quantitatively by researchers.	Eleven communication categories were identified and ranked: building rapport, explaining, questioning, listening, non-verbal, advising, opening, closing, assertiveness, disclosing personal information, and persuading. Effective consults were more likely to use patient centred skills.	Patient-Centred

Table 2.4: Other Methods

Skoglund, Isacsan, and Kjellgren (2003)	To explore the patient-pharmacist communication when dispensing prescription analgesics.	Community pharmacies, Swedan. Audio recordings of patient-pharmacist interactions.	42 audio recordings and transcripts were analyzed qualitatively and quantitatively with a focus on structure, content, and interaction.	Patients had a passive role and asked three questions. Pharmacists asked an average of 4.6 questions and 2% were open-ended. Pharmacists dominated the interaction.	Biomedical

Chapter Three

Face-work Theory: A theoretical approach to understand the nature of interpersonal interactions in patient-pharmacist encounters

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Keywords: Face-work theory, politeness model, patient-pharmacist interactions

Abstract

Pharmacists' roles have been evolving from dispensing to providing patient-centred care. Patient-pharmacist interactions can resolve drug-related problems, empower patients to adopt positive self-management strategies, and increase patient satisfaction. Appropriate patient-pharmacist communication is important in achieving these patient care aims. Respect, dignity, autonomy, and acknowledgment affect this communication process. Recent studies on patient-pharmacist interactions have shown limited patient-pharmacist engagement. In order to advance routine practice toward patient-centred care, pragmatic models are needed that recognize the social context of the interaction. Face-work theory can explain how certain speech acts link with face needs. This article describes face-work theory as a conceptual framework to study patient-pharmacist interactions. We can understand how specific verbal strategies function in multiple ways to meet both the instrumental and interpersonal goals of the counselling and how cooperation in interaction is negotiated and mutually constructed.

3.1. Introduction

The development of new practice models for pharmacists, such as patient-centred care, concordance, and medication therapy management (Chewning, 1997; Weiss & Britten, 2003; Ramalho de Oliveira, Brummel, & Miller, 2010), has prompted the growth of research in patient-pharmacist interactions. These models evolved because the effects of patient-pharmacist relationship on improving health outcomes have been recently recognized. The essentials of communication skills for healthcare professionals including pharmacists has been also widely acknowledged due to the increasing focus on the humanistic dimension of healthcare (Dupotey & de Oliveira, 2009). For example, patient adherence to medication is one of the fundamental goals of pharmacists' counselling. The quality of the therapeutic relationship and trust within this relationship is important to achieve this goal (Murphy et a., 2003).

Appropriate pharmacist-patient communication has facilitated patients' making changes to their lifestyle and increasing their involvements in their therapies (Bottorff, 2006) and improved patient health outcomes (Roughead, Semple, & Vitry, 2005). Rathan Shyam, Prasad, and Babu (2013) found that most patients' knowledge about asthma management improved after pharmacist counselling, and patients who received counselling from the pharmacists at the beginning of medication therapy to lower cholesterol had greater medication adherence (Taitel, Jiang, Rudkin, Ewing, & Duncan, 2012).

Research has also identified negative aspects of patient-pharmacist communication. A study found that pharmacists needed to improve the ways in which they explore patients' concerns and provide educational messages about adherence (Chong, Aslani, & Chen, 2013). Skoglund, Isacson, & Kjellgren (2003) found that patients had a passive role and pharmacists dominated the interaction. In addition, patients were found to resist pharmacists' advice when it

conflicted with own needs (Salter, Holland, Harvey, & Henwood, 2007). Babalola and Erhun (2001) identified when a miscommunication occurred between the pharmacist and patient. Not integrating patient perceptions was among these miscommunication instances. However; these results did not identify why a miscommunication occurred, why a pharmacist did not integrate a patient's perception, and why a patient responded in a particular way.

Overall, patient counselling is mostly product-focused (Puspitasari, Aslani, & Krass, 2009). Pharmacists have been found to poorly listen to their patients (Greenhill, Anderson, Avery, & Pilnick, 2011), and they do not identify patients with limited health literacy during counselling (Ngoh, 2009). Murad and Guirguis (2014) reviewed the literature to find that the majority of studies described pharmacist communication as biomedical, but did not examine the way patient-pharmacist interaction is constituted through social processes, nor do they offer explanations for current practices in patient-pharmacist communication. Furthermore, research is required to address context of the patient-pharmacist information exchange, the influence of power, and the impact of the interaction on the relationships and health.

Face-Work Theory can describe the effect of interactions' context and speech acts of a pharmacist and patient in situations of potential or actual miscommunication. The theories used in pharmacy communication research, such as social cognitive theory, theory of planned behaviour, and transtheoretical model and role theory (Shah & Chewning, 2006; Mutavdzic, 2010), do not look at the complex power negotiations operating between pharmacists and patients during counselling. By applying face-work theory, we can investigate the hidden power relations in patient-pharmacist communication and these findings can encourage pharmacists to think about their daily practice in different ways. The application of Face-Work Theory as a conceptual framework to study patient-pharmacist interactions could help us to understand the

impact of empathy, respect, dignity, and autonomy on how both the patient and pharmacist communicate with each other, because patient-pharmacist interaction is much more than just advice: it involves empathic understanding, acceptance, and genuine feeling (Rees, 1996).

This article describes the implications of face-work theory for patient-pharmacist interactions. It begins by describing the concept of face and face-work theory and then describes a model of face-work theory. Then it concludes by identifying the significance of using face-work theory to study patient-pharmacist interactions and how face-work theory can be used in future research.

3.2. Face

To describe face-work theory, first the concept of face has to be explained. The colloquial use of face was first used in ancient China as well as in different countries around the world. During everyday interactions, we use face. Culturally widespread metaphors include "to put on a good face," "to lose face," "face to face," "face time," "in your face," and "saving face." Face is a metaphor for individual qualities and/or abstract entities such as honor, respect, esteem, and the self. The American sociologist Erving Goffman introduced the concept of face in the scientific literature in 1967. Face-work was defined as "the positive social value a person effectively claims for himself by the line others assume he has taken during a particular contact" by Goffman (1967, p. 5). Durkheim's analysis of religious ritual has been used by Goffman to illuminate the ritual attention (face-work) that people must give one another (face) (Holtgraves, 1992).

Face is a socio-ethno-linguistic theory that explains how the communication process is negotiated between people. It is how the person wants to be seen by others, how he wants others

to treat him, and how he treats others. Face is both an intrapersonal and interpersonal concept and it is culturally, socially, and individually determined (Spiers, 1998). During everyday social interaction, face is an ever-present concern; both one's own face and the other face as each navigates its instrument goals and interpersonal goals, and avoids or mitigates threats to face such as being embarrassed, ashamed, or humiliated.

Face has been specifically defined theoretically and empirically. Several models of face-work have been built on Goffman's (1967) conceptualization of face. These models include making requests (Brown, & Levinson, 1987; Craig, Tracy & Spisak, 1986; Baxter, 1984), dealing with disagreement (Goldsmith, 1992), perceptions of forms of address (Braun, 1988), and the opposite of politeness. The scientific concept of face was defined as "socially situated identities people claim to attribute to others" (Tracy, 1990, p. 210). It is a social construct that resides in the flow of a certain interaction (Holtgraves, 1992).

Face-work is defined as a set of coordinated communication practices in which communicators build, maintain, protect, or threaten personal dignity and honor, and respect face (Domenici & Littlejohn, 2006). Face-work is a never-ending process of presenting one's self to others and acting toward others because instrumental goals are at work simultaneously with interpersonal face goals and concerns (Holtgraves, 1992). Different communities, especially cultural communities, do face-work differently, although the concept of face is constant from one community to another (Domenici & Littlejohn, 2006). The Politeness Model arose from face-work theory and is described in the next section.

3.2.1. Brown and Levinson's Model of Politeness

Brown and Levinson's (1987) model extended Goffman's (1967) concept of face by proposing that face is universal and has two aspects: a positive and a negative face. A positive face is defined as the desire to be appreciated and approved by another, whereas a negative face is defined as the freedom of action and freedom from imposition (Brown & Levinson, 1987). Brown and Levinson (1987) developed a theory to explain when a person's identity in a particular interaction is challenged, face threats occur. When one's fellowship is devalued or one's abilities are questioned, the positive face is threatened. However, the negative face is threatened when one's desired actions and autonomy are challenged. Politeness is considered a conventional set of strategies employed for doing face-work. Politeness strategies do not make the threat to face disappear but minimize the impact and the severity of face-threatening acts (FTAs).

In addition, Brown and Levinson (1987) proposed three social factors that influence the degree of politeness people will choose to use in a given case: (a) power, (b) social distance, and (c) ranking. The greater the power and the social distance (i.e., the lesser the degree of familiarity) between the speaker and the hearer, more politeness will be noticed between participants. The amount of politeness will also depend upon the ranking of the act. For example, when asking for a one-hundred dollars loan, a person will be more polite asking an employer than asking a sibling. Many communicative acts can have face-threatening issues if they violate the face needs of either party in a given interaction. The social relationship between the two parties affects the extent of the FTA. For example, people may perceive the amount of face threat carried by a face-threatening act in a higher level than the absolute or normal face threat of the FTA, if they are not intimate or differ in power.

A person interprets the context and pertinent dimensions of power, social distance, and ranking in order to choose a strategy that will support or threaten his face and also help in achieving his instrumental goals. Therefore, a person can be considered as a socially competent actor and have free will because he looks at the situation before choosing an approach to save or threaten face. However, the fundamental driving force (i.e., the desire to protect positive and negative face) is the same across cultures. Brown and Levinson (1987) found four fundamental strategies for being polite while doing FTAs:

1- Do the FTA bald on the record (i.e., no concern with face).

2- Do the FTA on the record with redress (i.e., with positive or negative politeness).

3- Do the FTA off the record (indirectly).

4- Do not do the FTA.

Every person has communication strategies to protect themselves and others from the inconveniences, embarrassments, and humiliations that threaten face. The strategies to repair face threats are adapted and learned from ordinary everyday social interactions. Preventive face-work strategies can be used to avoid or minimize FTAs. Preventive face-work is accomplished by avoiding face-threating topics, changing the subject of conversation when it appears to be moving in a face-threating direction, and pretending not to notice when something face-threatening has been said or done. Corrective face-work occurs when face threats are not anticipated and the loss of face must be remediated. It is offered defensively by the person responsible for creating face threats or protectively offered by other people who witness the loss of face, or offered by the person who has lost face as he attempt to regain lost social identity.

3.2.2. Lim and Bowers' Model of Politeness

Lim and Bowers (1991) expanded the concept of positive and negative faces (Table 3.1). Their model describes multifunctional discourse and relates multiple face needs to basic human processes. In addition, this model provides additional explanations on how human need and communication strategies are connected.

Autonomy face, fellowship face, and competence face are three types of face that emerge in most interactions (Lim & Bowers, 1991). Autonomy is defined as "a sense of self apart from others. It involves a feeling of freedom to act and an ability to control one's life, an idea of privacy, and a sense of boundary between self and other" (Domenici & Littlejohn, 2006, p. 12). In addition, the autonomy face is demonstrated when the person acts in a way to distinguish himself from others. Autonomy is more important in individualistic cultures, such as western cultures, as the rights and responsibilities of individuals within these cultures are very important. "Fellowship involves the need to be included and a sense of connection between the self and other" (Domenici & Littlejohn, 2006, p. 12). Competence refers to "the attribution of ability, respect for position, and contribution to society" (Domenici & Littlejohn, 2006, p. 12). Positive face needs can be seen in the competence and fellowship faces, whereas autonomy is considered a negative face need in the politeness model.

The three different types of face needs defined above are addressed by different kinds of face-work. Solidarity strategies address fellowship and belongings needs by agreement, sympathy, cooperation, and the use of in-group identity markers (Lim & Bowers, 1991), whereas fellowship and belongings needs are threatened by excluding the other person from a group. The politeness strategies that enhance the competence face needs are called approbation. Approbation

is expressed by compliments. Signs of incompetence, lack of ability, or loss of bodily control threaten the person's competence face want (Lim & Bowers, 1991). The autonomy face is supported by tact. The efforts to minimize the loss and maximize the gain of freedom of action by giving options or being indirect and tentative are the main characteristics of tact strategies (Lim & Bowers, 1991). The next section will describe how this model can be applied to study patient-pharmacist encounters.

3.3. The Significance of Face-Work Theory for Pharmacy Practice Research and its Implications

Bylund, Peterson & Cameron (2012) argue that face-work theory and politeness model have great potential as applications to study how a provider and patient affect each other's responses. Spiers (2002) used this theory to explore the interpersonal context of expressing and negotiating social identity in home care nurse-patient interaction. Recently, researchers in health sciences have employed face-work theory in the development of a coding system for empathic communication (Bylund & Makoul, 2002), to understand how patients introduce internet information to providers in more or less face-threatening ways (Bylund et al., 2007), and to study how pharmacists and physicians interact (Lambert, 1996). This approach is becoming significant to understand this aspect of communication according to Shah and Chewning (2006) who suggested the use of Brown and Levinson (1987)'s model as concept to analyze the patient-pharmacist dyad. "Examining patient-pharmacist communication as an interpersonal dyadic interaction may help us understand collaborative problem-solving activities, and interpersonal relationship development within the context of mutual trust, rapport, and familiarity between the participants" (Shah & Chewning, 2006).

Appropriate patient-pharmacist communication is essential to both the process and outcomes of pharmacy care. Patient-pharmacist communication is transactional and based on interpersonal consideration where both the patient and pharmacist affect and are affected by each other simultaneously. It is social action, not only a transmission of information. Face needs such as dignity, autonomy, respect, acknowledgment, and the need for belonging affect the conversation and communication process between the pharmacist and patient. Face-Work Theory describes how speech acts link with these face needs to achieve the desired ends in the most cooperative manner. By acknowledging the transactional communication value, pharmacists may achieve a balance between instrumental goals and interpersonal goals. Therefore, face-work theory is an interesting approach to explain how this balance is negotiated during patient-pharmacist encounters. Face-work theory seems promising because the current patient-pharmacist communication does not explain how communication is directed by basic human and social needs such as people's need to be autonomous, part of a group, and seen as competent.

During everyday practice, pharmacists demonstrate the above three types of face. For example, pharmacists' autonomous action can be noticed when they offer advice that conflicts with a physician's opinion. Second, pharmacists want their patients to see them as competent professionals in their practice and to trust their knowledge as drug therapy experts. Finally, pharmacists want to be connected with their patients to meet fellowship needs. Patients can also demonstrate these three types of face. Sometimes, a patient may resist a pharmacist's advice because it threatens his autonomy face. Patient resistance to pharmacists' advice can be a barrier to establishing a cooperative relationship between a pharmacist and patient. Face-work theory can describe why and how a patient resists a pharmacist's advice and how a pharmacist responds

to this resistance. Patients may not reveal any non-adherence issues to their pharmacists because doing so will threaten their competence face. Patients' agreement and cooperation during their communication with their pharmacists addresses their fellowship needs.

Face-Work Theory helps to explain different approaches that both patients and pharmacists take when their faces are potentially threatened or when they threaten each other's faces. Patient-centred skills can be applied during patient counselling when a pharmacist acknowledges what can threaten a patient's face, and encourages a patient to engage in the conversation. During the interaction, both the pharmacist and the patient want to achieve their own instrumental goals. For example, patients want to pick up their prescriptions and have their concerns addressed by pharmacists. Pharmacists want to be sure that patients are taking the right medications safely. Simultaneously interpersonal goals of both the patient and the pharmacist can affect the process of achieving their instrumental goals. Attention to face needs is reduced when instrumental goals take precedence over interpersonal goals. For example, a pharmacist may threaten a patient's sense of autonomy and competence when discussing potentially embarrassing issues such as non-adherence to medication. The pharmacist must decide if the instrumental goal of improving medication therapy outweighs the interpersonal goal of a cooperative interaction. If the instrumental goal predominates, the pharmacist must then decide how ask about medication adherence in manner that minimizes the face threat. For example, a pharmacist can reduce face threat by saying other patients have had issues remembering to take medication. Face-work theory can help us to observe how one approaches the other in a cooperative way to accomplish his instrumental and interpersonal goals.

Brown and Levinson (1987) specify three variables that determine the degree of face threats. These are the absolute amount of imposition of the act, the position that the speaker has

over the listener, and the social distance between the speaker and listener. Both the pharmacist's and patient's perception of the face threat, the power relations, and the social distance between them affect the degree of the face threat and determine which speech act or communication strategy they are going to use. During patient-pharmacist interactions, these variables that determine the degree of face threats such as power can be demonstrated. Power relations are defined as the specific legitimacy that the speaker has for a particular act. For example, a pharmacist has the legitimate right to ask a patient if he is adhering to his medications. However, the pharmacist cannot advise the patient on financial investments (Spiers, 1998). The desire to do the face-threatening act, communicate effectively, and satisfy at least some of the listener's face needs will determine which approach both the pharmacist and patient will use.

Face-work theory has many implications for researchers, pharmacists, and educators. Pharmacists' new roles in providing health care services such as prescribing and medication therapy management confront many challenges such as patient resistance and interprofessional conflicts to theses unfamiliar pharmacist roles. Researchers can use face-work theory to gain an understanding of pharmacists' responses as well as the strategies that pharmacists may employ to address common situations of face threats with their patients. Researchers can analyze patient-pharmacist interactions in different pharmacy settings to gain a comprehensive understanding of patient-pharmacist face-work strategies across different social and cultural groups. Research can also help explain how gender and age affect face-work strategies.

Ignoring patients' face needs or misinterpreting patients' speech acts can lead to patient resistance, inappropriate actions, or a breakdown in interactions. These findings may enhance pharmacists' understanding of the importance of language in achieving the therapeutic success of patient-pharmacist interaction. Pharmacists' awareness of existing social relations and how to

approach their patients in cooperative ways may be improved. Factors that affect the counselling process can be further defined and researchers can investigate them.

Educators can design certain interventions to improve pharmacists' communication skills by teaching them about patients' different face needs and how better attention must be given to these needs. Educators can teach pharmacists about the effect of interactional contexts and pharmacists' instrumental goals on face needs and face threats. They can also educate pharmacists about the best possible ways to minimize face threats to patients or resolve any communication breakdown.

3.4. Conclusion

Pharmacists are not only responsible for dispensing and educating patients but also for providing patient-centred care whereby they assess the appropriateness of medication therapy, ensure that patients have an understanding of drug therapy, encourage medication adherence, and monitor patient outcomes. In addition, it is important to evaluate the quality of patient counselling to determine the extent of empathy, understanding, and acceptance from the pharmacists. Studies in pharmacy practice have not investigated how meaning is co-created in the interaction in an interpretive way.

The politeness model proposed by Brown and Levinson (1987) with the modification by Lim and Bowers (1991) is a well-structured framework to analyze pharmacist counselling. We can observe how a pharmacist and patient approach each other in the most cooperative way to achieve their ends and to investigate the influence of power, social distance, and culture on these approaches. In addition, researchers can use face-work theory to understand why patient-

pharmacist interactions unfold in a particular manner and how meanings in these interactions are created, expressed, and perceived.

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Table 3.1. Central Concepts in Face-work Theory

Face	• The public self-image one wishes to claim. • Linked to fundamental cultural assumptions about the social persona. • Face is emotionally invested and can be lost, maintained, or enhanced. • Generally mutual cooperative concern with face is integral to social interaction • Face can be routinely ignored in certain situations of: social breakdowns (effrontery), need for urgent cooperation (emergency) or in interests of efficiency (Brown & Levinson, 1987).
Face Needs	• Specific aspects of face considered essential in a social group • Essentially there are two main related aspects of face: negative face (autonomy, personal space, freedom from imposition, freedom of action) and positive face (desire for self-image to be acknowledged and approved). • Other face needs may include needs for competency, tact, poise, freedom from obligation or impingement, in-groupness or individuality. • These face needs, often referred to as desires are attributed by interactants to one another. • Each face need is addressed with specific forms of face-work
Face Threats	• Speech acts, verbal or nonverbal communicative actions that by their nature threaten the face needs of the self or other; e.g., loss of bodily control results in loss of poise or loss of competency face; commands, orders, requests, criticism.
Face-work	• The communication strategies used to protect, maintain, and enhance face to satisfy face needs and to mitigate face threats.

Note: Reproduced with permission from "The use of face work and politeness theory," by Spiers, J. A., 1998, *Qualitative Health Research, 8(1),* p. 30.

Chapter Four

Expressing and Negotiating Face in Community Pharmacist-Patient Interactions

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Keywords: Face-work theory, audio recording, patient-pharmacist interaction

Abstract

Background: A collaborative patient-pharmacist relationship may result in greater patient satisfaction with pharmacy care and improved medication adherence. An effective and successful pharmacist-patient relationship is established when both pharmacist and patient have mutual understanding of three primary areas of public social image that are fundamental to social interaction: autonomy, competence or esteem, and fellowship. Pharmacists and patients attend to these three face needs through their communicative strategies during their interaction. Pharmacist-patient interactions are not just about transfer of information and medications. Both parties assess the situation, the others' intentions within the context of their own goals and this influences how they choose to act throughout the interaction. Current theoretical perspectives are not adequate in getting at social acts in pharmacist-patient communication. This study use Face-work Theory as a guiding framework to understand interaction process in pharmacist-patient communication.

Objectives: This study aims to determine face needs and threats within community pharmacist-patient interactions.

Methods: The study used an exploratory descriptive study that drew upon principles of ethology. Twenty-five 25 audio-recorded of community pharmacist-patient interactions were collected and analyzed. The average length of these interactions was 3:67 minutes with the maximum time of 9:35 minutes and minimum time was 0:39 seconds. After the interaction, patients completed a written survey on their perception of pharmacist relationships and their satisfaction.

Results: Face needs for both pharmacist and patient were found. Autonomy, competence and fellowship face needs were negotiated in the following contexts: participative relationship, concordant role expectations, sensitive topics, and expertise and knowledge. Mostly competence

face needs for both parties were found in role expectations context. Most common communication strategies used to address face were solidarity and to mitigate face threat was indirect and depersonalized questions.

Implications and significance: Face-Work Theory is a novel approach to understand process and outcomes of patient-pharmacist interactions in community pharmacies. Linking speech acts with face needs and threats may help to understand why and how pharmacist-patient interactions achieve both instrumental and interpersonal goals.

4.1. Introduction

Both pharmacists and patients attempt to facilitate maintenance of their own goals and responsibilities when they interact in community pharmacies. Pharmacists dispense medications, assess the appropriateness of medication therapy, ensure patients have an understanding of their drug therapy and address their needs. The fundamental patients' role dimensions are information sharing, responsible behaviour, and active communication related to health care (Worley & Schommer, 2002; Worley, Schommer, & Finnegan, 2003). Patients' responsible behaviour includes: working with the pharmacist to manage their medications, getting all their prescriptions refills on time, and seeking pharmacists' help. These instrumental goals occur in the interpersonal communication process between pharmacist and patient, where both parties affect and are affected by each other (Gerbner, 1956). Claimed and perceived social identity by both pharmacist and patient are fundamental dimensions of this social process.

Recently, research in pharmacy communication research has examined the structure and content of pharmacist-patient interaction (Puspitasari, Aslani, & Krass, 2009; Shah, & Chewning, 2006) but there is no research exploring how pharmacist and patient negotiate social acts. Spiers (1998) stressed the importance of mutual self-concept and self-presentation to understand how each act of communication influences and is influenced by the flow of events in nurse-patient encounters. Pharmacist and patient cooperate in negotiating how they want to be seen by others, as well as how they are willing to view others in relation to the current context. Thus, understanding the micro level communicative behaviours of patient-pharmacist interactions and the interpersonal needs that are supported, enhanced, or threatened by the flow of events in the encounters can provide clues as to how both pharmacists and patients want to be perceived in the interaction and how they strategically use communicative strategies to support

the interpersonal aspects in order to facilitate work toward instrumental goals. Face-work theory can be used to investigate how pharmacist and patient express and negotiate their interpersonal needs.

Face-work involves a set of coordinated communications practices in which communicators build, maintain, protect, or threaten personal dignity, honor, and respect (Domenici & Littlejohn, 2006). In face-work theory, the concept of face represents claimed social image in the interaction. This theory has been used in health professional-patient interactions to describe the interpersonal context of expressing and negotiating social identity in home care nurse-patient interaction (Spiers, 2002) and to understand how pharmacists and physicians interact (Lambert, 1996). Murad, Spiers, and Guirguis (2013) described the significance of using the politeness model proposed by Brown and Levinson (1987) with the modifications by Lim and Bowers (1991) as a conceptual framework to understand how certain verbal strategies are linked with face needs.

Pharmacists' and patients' social identities includes autonomy (i.e., freedom in thought and action), fellowship (i.e., sense of belongingness and being part of group), and competence (i.e., capability and proficiency) (Lim and Bowers, 1991). Threats to face occur when there are challenges to these needs. These three types of face needs are addressed by different kinds of face-work communication strategies. For example, agreement, sympathy, and cooperation are solidarity strategies that address fellowship and belongings needs (Lim & Bowers, 1991). Excluding the other person of a group threatens fellowship needs. Competence face needs are fulfilled by compliments and threatened by lack of ability (Lim & Bowers, 1991). Giving options or being indirect and tentative are the main characteristics of tact strategies that supported person's autonomy needs (Lim & Bowers, 1991).

The interactional activities between pharmacists and patients in community pharmacies involve many social acts such as asking questions, giving information, or advice, offering criticism, or making a request. These social acts create contexts where trust, legitimacy, authority, autonomy, and competence are negotiated and challenged. For example, pharmacists are empowered by their expertise in drug therapy to assess medication use and support medication adherence. The way pharmacists approach their patients to achieve this goal will establish a certain interpersonal interactional context, in which where both pharmacist and patient will indicate their face needs. Patients wanting their prescription refilled might expect pharmacists to inquire about their use of medication in order to assess and evaluate self-management, but at the same time, they may also want to demonstrate their competency and expertise in taking their medications. In this study, we explored how face needs were expressed and how they were responded to through communicative social acts. We described the specific contents of pharmacist-patient interaction with face implications and the communicative strategies used in these contents. The following research questions were addressed:

(1)- What are the main activities of community pharmacists?

(2)- What interactional contexts appear to contain face implications?

(3)- What are the types of face needs and face threats are implicated in these contexts?

4.2. Methods

This study used an exploratory descriptive design that drew upon the principles of ethology. Ethology identifies complex behavioural patterns through systematic observation and description under natural condition (Lehner, 1979; Morse & Bottorff, 1990; von Cranach, Foppa, Lepenies, & Ploog, 1979). The study began with an inductive phase to identify and describe the contexts of instrumental and interpersonal processes and communicative behaviour patterns of

pharmacist-patient dyads in community pharmacy settings (Morse, 1995). This phase provided us with the main communicative contexts that contained communicative strengths or challenges. In the next phase, we used a guiding framework of Face-Work Theory and Politeness Model by Wood and Kroger (1993) to identify the social acts in the main communicative contexts (Spiers, 2000).

4.3. Data Collection & Sample

The study was reviewed and approved by the University of Alberta Health Research Ethics Board (HREB) (Project ID# Pro00015163). We recruited independent community pharmacies from major one city in western Canada. The research assistant obtained written consent from the pharmacy manager and pharmacists and then collected pharmacy environment notes and pharmacists demographics and their descriptions about pharmacy day. Observation times were identified with the pharmacists so as to maximize patient encounters during a 6-8 hour block of time and minimize pharmacist burden. Patients were eligible if they were at least 18 years of age and older, able to contest, and were picking up their prescriptions. The pharmacist identified patients receiving a prescription and asked if they were interested in participating, and if they were, the research assistant (RA) explained the study, answered any questions, and obtained consent written consent from the patient. The digital audio recorder was started when the pharmacist-patient encounter began until the patient left the pharmacy counter. The RA was not present during the interaction. After the interaction, patients completed a written survey to assess pharmacist-patient relationship quality and patient satisfaction with pharmacist services. Previous research showed evidence of validity and reliability for this instrument (Worley and Schommer, 1999). Worley and Schommer (1999) analyzed collected mailed survey of 800 individual in the United States to investigate the effect of pharmacist, expertise, contact

intensity, and mutual disclosure on the relationship quality. Model relationships were tested using path analysis. Statistically significant standardized regression paths using relationship quality as the dependent variable (Adjusted $R^2 = 0.65$) were 0.50 for perceived expertise of the pharmacist and 0.39 for contact intensity. The statistically significant standardized regression path using relationship commitment as the dependent variable (Adjusted $R^2 = 0.53$) was 0.62 for relationship quality. In addition, patient's overall satisfaction with pharmacists' services was assessed with a 4-item measure that has been shown to provide an adequate assessment of overall patient satisfaction (Johnson et al, 1999).

4.4. Transcription

All 25 audio recordings were transcribed by a professional transcriptionist. Data analysis was managed using NVIVO (10.0 version). A professional transcribed the 25 audio recordings of patient-pharmacist interactions. Jefferson's conventions (1984) were used to capture overlapping, interruptions, stuttering, silences, pitch, loudness, and minimal responses. Minimal responses included: yeah, ah, hm, mm right, I know that occur simultaneously with the speaker's talk to indicate attention, agreement, or disagreement.

4.5. Data Analysis for Surveys

Three scales measure patients perceptions of 1) patient's trust and satisfaction in the pharmacist (7 items), 2) pharmacist expertise (4 items), and 3) relationship commitment (3 items). Surveys were scored based on the developers' guidelines as described (Worley and Schommer, 1999). For each survey, items reflecting negative attributes were re-coded. If items were missing from a scale, the mean of the available items was inserted for the missing items. If more than half of the scale items were missing for a patient, then scale score was treated as

missing. Descriptive statistics by SPSS (10.0 version) were calculated to characterize participant demographics as well as survey responses.

4.6. Data Analysis for Audio Recordings

In Face-Work Theory, maintaining face refers to protecting and enhancing our own and others' sense of autonomy (freedom in though and action), solidarity (sense of belongingness and being part of group), and competence (capability and proficiency) (Lim and Bowers, 1991) (Figure 1). It is a fundamental multidimensional of interpersonal interaction that is communicated and negotiated through verbal and non-verbal language as people interact. Maintaining face generally tends to occur at a sub-conscious level. Thus, our analysis was guided by the assumption that the act of speaking is a basic instrument of social action and that interpersonal interaction both constructs social reality and is constructed by that reality (Felming, 1995).

The guiding framework for this study was based on Brown and Levinson (1987) model of politeness and Wood and Kroger's (1993) methodological approach for analyzing face work in social interactions. Data were analyzed based on the coding categories of Metts and Bryan (1984), Lim and Bowers (1991), and Wood and Kroger (1993) as interpreted by Spiers (2000).

Wood and Kroger (1993) coding strategies applied to the discourse as a whole and can also be used to focus on particular aspects of face work because their analytic approach is grounded in the face work theory of Brown and Levinson (1987). However, Wood and Kroger (1993) do not provide a set of fixed codes that can be directly applied to the discourse. Therefore, we also used Metts and Bryan (1984) and Lim and Bowers (1991). Using these sets of coding schemes provided us with different level of analysis; for example, Wood and Kroger (1993) are more specific in term of individual words and parts of sentences, whereas Lim and

Bowers (1991) addresses more global speech acts. Both Wood and Kroger (1993) and Lim and Bowers (1991) use three dimensions of face but Wood and Kroger's (1993) is more operationalized. In addition, Metts and Bryan (1984) were used to identify additional strategies that were not included in the coding scheme by Lim and Bowers (1991) such as interruptions and repetitions.

In the first step of interpretive phase, we conducted a descriptive analysis of the data to identify topics of conversations, purposes, processes, and outcomes. This data analysis step began with a global review of the interaction. We described the overall context, flow, character, and story lines and this provided us with a narrative description of patient-pharmacist interaction in the form of *what happened, how it happened* and *why it happened*. This initial step prepared and organized the data for analysis providing us with the main interactional activities between pharmacist and patient. We were also able to determine the segments in which there appeared to be some kind of face implications.

Next, these segments were repeatedly reviewed and we came up with initial categories of communicative episodes that are related to face needs and face threats. These codes were guided by these questions *(what is going on here? What is the pharmacist is trying to do? What is the patient is trying to do?)* In addition, these codes tended to be based on the primary question *(What type of face needs are these interactions demonstrating? What is it about this episode of interaction that showed face needs or face threats?)*. Afterwards, in looking across different interactions and common themes about communicative contexts, began to emerge. The patient, for example, was trying to show his competence in managing his health and we identified how he was showing his competence and the pharmacist' responses to this behaviour. Below is an example of competence needs.

Rx: {…},This will ALWAYS work better, and last longer, if you keep it in the box, right?

Pt: Yeah, well that's why I brought (or close to) it back with the box, so I

Rx: Perfect. {…}.

Then the contexts with face implications were determined. We used Wood and Kroger's (1993) framework for categorizing social acts and their associated communicative strategy to describe the behaviour events. Social acts are defined as the outcome of an utterance or series of utterance such as a request, suggestion, advice, and compliment (Wood & Kroger, 1993). For example, one pharmacist said, "Well thank you very much for your patience. I appreciate that." This is a social act of a compliment. Below is an example where, the statement *"as long I can remember that"* might be coded as giving hints or give clue.

Rx: Do you have any questions?

Pt: No, as long I can remember that

Rx: Ok

In addition, below is an example of a social act of advice giving by pharmacist. In this situation, the patient admitted not taking her blood pressure medications which is a social act of confession or admission of guilt. Pharmacist then used conversational strategies such as giving reasons to stress the importance and relevance of her advice.

Rx: How's your blood pressure doing?

Pt: Uh, it's okay today. Last week it was- but see I didn't take them for about three weeks. I know, I know, I know, I know! <laughter> I hate going to the doctor, you know that!

Rx: I KNOW. He's done three months here, so you're good for a while now. Everyday, everyday,and if you miss, take as soon as you remember, because even if it's a couple of hours either way (yeah), you have to be sure.

Rx: And the thing about blood pressure medicine is that we're looking at something long-term, so you miss one, meh. You start to miss two or three weeks, the pressure (yeah) (xxx) heart

Rx: You just don't want to do that, right?

Pt: I am with your (xxx)

Rx:You kind of get the point, yeah.

Pt: Yeah.

In the final step, a coding scheme of Spiers (2000) and Lim and Bowers (1991) were used to determine the communicative means by which face is implicated, whose face is being implicated, and which type of face is being implicated in terms of solidarity, competence, or autonomy, or a combination of these three faces.

4.7. Result

Twenty-five audio recordings of patient-pharmacist interactions in eight different pharmacies were used in this study. Ten (five males and five females) pharmacists participated and more than half of these pharmacists were graduated in the 2000s and described pharmacy work as *slow days with busy times* (Table 4.1). The majority of the patients were female 17 (68%) and the majority of the patients had either a high school degree or college certificate (Table 4.1). These interactions included 10 (40 %) new prescriptions, 13 (52 %) refill prescriptions, and two were both new and refill prescriptions. The average time of interaction was 3:67 minutes with a maximum time of 9:35 minutes and minimum time of 0:39 seconds. Our surveys showed that patients were highly satisfied with the pharmacy services and they trusted their pharmacists (Table 4.2). In the first section of results, we described the main interactional activities of community pharmacists and in the second section we illustrated the interactional contexts of face implications. The extracts were present are examples of the main patterns and trends we identified in the data. Narrative descriptions of each pharmacist-patient interactions and pharmacy environment notes are included in the Appendix. We described each

pharmacist communication style in these narrative description and pharmacy environment notes described the busyness of the pharmacy when pharmacist-patient interactions were recorded.

4.7.1 Main activities of community pharmacists

We found that pharmacists typically enacted common communicative patterns when they interacted with patients. They opened the interaction with their patients by formal or informal greetings and then they proceeded with their consultation activities. They initiated ending of interaction by saying, "There you go" and handing the bag to the patient. Pharmacists trend to end the interaction using conventional polite closing rituals such as saying, " Thank you", "Have a nice day", "Take care, "Any questions?" "What questions do you have?" or joking. Pharmacists' main activities during new and refill prescriptions differed. In the following section, we describe the dominant patterns of interaction in term of the instrumental goals: assessing patients' information and medication teaching in the context of new prescription and checking the previous refill records, exploring patient medication experience, and seeking information about how the patient is self-managing in refill prescription.

4.7.1.1 New Prescription

a- Assessment of patient information

A major interactional activity observed in the data set was assessment of patients' information regarding new prescriptions. Pharmacists checked the validity of prescriptions and asked patients what the physician had told them about the medication, its purpose and its directions for use. Pharmacists approached their patients with direct questions about information the physician had provided about the medication, whether they had used it before, and the reason for taking the medication. Pharmacists' typical direct questions included the following: *"What*

did the doctor tell you about the medication?" or "This is an antibiotic (name). Does that sound familiar to you?"

b- Medication Teaching

Teaching patients about the new medication was one of the main therapeutic goal in these patient-pharmacist interactions. After ascertaining that the medication was new, pharmacists instructed their patients how to take the medication, its efficacy, its duration and its side effects. Pharmacists usually explained how to incorporate the medication into the patient's daily routine and suggested techniques to manage side effects. Other aspects of patient education included drug-drug interactions and storage. Pharmacists mostly instructed their patients during this task through a didactic conversation style. A typical example is "*Dr (name) has given you an antibiotic, okay? This is usually used for urinary or bladder-type infections. You're going to take one tablet twice a day."*

4.7.1.2. Refill Prescription

a- Checking the previous refill records and confirming the purpose of the current visit

Before issuing any refill medications, pharmacists checked patients' record about the previous refill and confirmed patients' purpose after the conventional opening phase of consultation (e.g. greetings) by asking *"You are picking up your prescription?"* or just stating the name and the dosage of the refill medications.

b- Explore patient medication experience

During refill prescriptions, pharmacists asked the patients about the benefits they experienced while taking their medications, the side effects they may have noticed and how they

were using their medications. Thus, pharmacists could address any non-adherence issues and/or drug-related problems. A typical example was: *"Have you seen any difference since you started taking the medication?"*

c- Seeking information about how the patient is self-managing

After engaging patients in dialogue about their use of the medications, pharmacists often sought information about the monitoring parameters. For example, they asked about the last time patients checked their blood pressure or blood glucose and the results. A typical example was: *"How is your blood pressure? Do you monitor that regularly?"* Pharmacists asked about future follow-up plans with physicians with this activity. In summary, the previous sections were the macro level interactional contexts of pharmacist-patient interactions. Next, we describe the level of situations implicating face.

4.7.2. Interactional Contexts of patient-pharmacist dyads

In this second section of results, we describe the interactional contexts that created the potential for face needs and/or face threats. These contexts included the goals patient and pharmacist worked toward by negotiating their needs and expectations. Examples of face threats to autonomy and competence were found in 15 of 25 interactions. These face threats were mutual. Face needs were mostly founds in the context of participative relationship.

a- The Context of refill versus new prescription

The main activities of pharmacists' consults within refill prescriptions required a significant degree of negotiation of shared expected health outcomes. Patients with refill medication had experience with their medication and more expertise than patients with new medications. Before issuing refill medications, pharmacists investigated how the patients were

using their medications and how they were managing their general health issues. These activities could threaten the patient's sense of competence face. Thus, these instrumental goals had greater potential for face threats for the pharmacist, the patient or both simultaneously. We found that 11 (85%) of refill prescription and two (20%) of new prescriptions interactions included face threats. Furthermore, two interactions of both new and refill prescriptions also involved some implications for face. The following contexts describe in depth the situations implicating face within these two types of prescriptions.

b- The context of Establishing a Participative Relationship

A cooperative interaction context was built by negotiating and maintaining a sense of solidarity through creating opening to express concerns or ask questions, gift-giving, social talk, self-disclosure, and engagement. Pharmacists encouraged their patients to participate in the interaction by creating the opportunity for patients to engage and ask questions as a way to facilitate self-disclosure of information pertinent to the medications. For example, pharmacists' typical questions for new prescription *("Do you mind me asking what type of infection do you have?"* or *"Can you tell me what you saw the doctor for?")* Although pharmacists approached the patient in a participatory way, they attempted to minimize the imposition of these types of question by using downgraders (previously underlined), which decreases the directness of the questions. In another instance, the patient had a refill for her asthma medications and a new prescription for an acne gel. The pharmacist started the conversation by stating the name of her refill prescriptions. Then, he asked the patient if she had any questions about her refill medications and she asked about how to use it. Afterwards, the pharmacist responded to the patient' need and instructed her how to use her medications.

Rx 1101: Great, so the Ventolin and Symbicort you have for it <pause>

Pt 1101: *Yeah.*

Rx 1101»: *Any questions on this?*

Pt 1101: *Um, is there, like directions on how to use the Symbicort, because I kinda forget.*

Rx 1101: *Oh yeah, Symbicort, I..aha..could quickly go over that with you here. So it's just-*

Pt 1101: *It's a little clip.*

Rx 1101: *Yeah, it's a little bullet thing. You've got, okay, my demo.*

Pt1101: *Okay.*

Rx1101: *Okay, so mine looks just like yours. Take off the shell so it looks like that. It's got a little counter tube you're going to see here, that counts down the doses.*

P1101: *Okay.*

Rx1101: *So right now there's 120 doses. It will count down. Usually when it comes up to about the last 20, it's going to be in red-*

Pt1101: *Okay.*

Rx1101: *Just to let you know that it's running low. So to use it, you click it all the way to the <clicking> all the way to the right, and then to the left. You hear that click?*

Pt1101: *Yeah.*

Rx1101: *So right, left, okay? That click tells you the dose is ready. Okay, so a doctor wants you to inhale one puff, or one dose, twice a day.*

Pt1101: *Okay.*

Communicative gift giving such as expression of empathic understanding and gratitude were indicators of mutual solidarity within this participatory relationship. For example, one patient said ("*I knew there wasn't any point in going to the doctor because you wait a long time to get into him.")* as a gratitude response after asking the pharmacist's advice about her stiff neck. This indirect compliment and she thanked the pharmacist because it meant she did not have to go to the doctor and wait for hours. In another example, a patient had a new prescription for an antibiotic after childbirth. When the pharmacist explained why she had been prescribed this antibiotic, the patient mentioned her perineal tearing and the pharmacist expressed her empathy and solidarity about this experience. Despite the use of weak euphemisms to describe the

experience and treatment of perineal tearing during childbirth (e.g. "it's crazy"), it is clear that both patient and pharmacist shared a common perception of that experience.

Pt: *Yeah <sigh> I have some tearing, it's crazy.*

Rx»: *Yeah, I had some stitches as well. Yeah, it's painful*.

Both the pharmacist and patient's self-disclosure and social talk reflected a belief a participatory relationship is based on knowing each other and showing interest in one another. In one dyad, patient started a social talk after the pharmacist finished her information giving about the medications.

Pt: *Okay, so have you been very busy?*

Rx: *Yeah.*

Pt: *Yeah?*

Rx: *It's funny, the summer didn't quiet down at all. It usually does and it hasn't in the slightest.*

Pt: *Is that right, eh?*

Rx: *It's good for us, it keeps us going.*

Pt: *Oh, for sure <pause> oh, for sure.*

Rx: *I don't mind.*

Pt: *You've got that right.*

In another extract, the social talk reflected an interactional intent to acknowledge the pharmacist beyond the instrumental goals of medications. In this dyad, patient volunteered some personal information. She talked about her disability and her need for a break. The pharmacist responded with an approbation and support ("*alright, that's good, a little break, a little stress relief")*. Afterwards, the pharmacist recognized the patient's willingness to discuss her health

concern; thus, she encouraged the patient to reveal more information by saying (*"How are you feeling otherwise, how things' going?")* This was sufficient to encourage the patient to discuss her health concerns and the reference. The pharmacist phrase ("not too bad?") maintained both pharmacist and patient faces and supported patient's use of a downgrader ("but"). It is also possible that the pharmacist wished to avoid this topic and downgraded its important by suggesting it was "*Not too bad*". This topic of conversation ended with using ("we") first by the patient and then the pharmacist an indicator of a sense of solidarity.

Rx 7105: *Okay, so this is covered and..aha.. I don't have this one yet, so I..aha..will take the number and then I'll take the cost off.*

Pt 7105: *Yeah.*

Rx 7105: *So I won't charge you these.*

Pt 7105: *No.*

Rx 7105: *Good.*

Pt 7105»: *I'm on disability for a while now.*

Rx 7105: *You are, you're not working for a while then, yeah?*

Pt 7105: *No, not until after Christmas, they gave me, yeah.*

Rx 7105: *<u>Alright, that's good, a little break, a little stress relief.</u>*

Pt 7105: *I need it anyway, with all the, like, I've got, had all my scopes and yeah*

Rx 7105: *How are you feeling otherwise, how things' going? <crumbling sounds>*

Pt 7105: *Uh <pause> fairly good. Bladder bothers me a bit but it's <pause>*

Rx 7105: *<u>Not too bad?</u>*

Pt 7105: *Right, I've got my scope on September. <u>We</u>'ll see, the jury will be out. <laughter>*

Rx 7105: *Until <u>we</u> find out.*

Pt 7105: *Yeah*

Indicators of patient engagement during the consultations included supportive minimum responses and repeating what the other is saying. In interactions for four new prescriptions and

one refill, we found that patients sometimes repeated what the pharmacist said. These patients' responses during pharmacists' acts of giving information indicated they were engaged and contributing in the interaction. During this patient's behaviour, pharmacists responded with murmured agreement, minimum yet to bring a o'clock news when responses or repeated the information again. The following extract illustrated how a female patient repeated the medications instructions (antibiotic) using the same words said by the pharmacist. The patient was trying to establish mutual understanding of medication use. The conversation was relaxed, not rushed, and the pharmacist responded with minimal responses ("yeah"), or repeated the instructions again (*"within 24 hours, yeah, within each 24 hours, you take it four times")*. Once there was solidarity, the pharmacist started the next topic of conversation (discussing the side effects).

Rx 5103: *{..}. So yeah, one, you're taking one every six hours and what that means is you're taking four times a day. You don't necessarily have to set your alarm clock and get up every six hours, what you can do is divide your waking hours into four equal parts, breaking up morning, say when you wake up it's six o'clock, twelve o'clock, two o'clock and then eight o'clock or something like that.*

Pt 5103: *Okay.*

Rx 5103: *And then, and but you keep the times consistent throughout the day, the one week that you're on it.*

Pt 5103: *Okay.*

Rx 5103: *Um, yeah, you should notice that you're getting better. You shouldn't start to develop some infections from the, from the tears, which means that this is working very well for you. But if you see that you're still developing, it's still getting infected, then it's possible that it's not working well for you.*

Pt 5103: *Okay.*

Rx 5103: *Yeah, in that case <pause>*

Pt 5103: *So at least four times a day?*

Rx 5103: *Yeah.*

Pt 5103»: *Within 24 hours?*

Rx 5103: *Within 24 hours, yeah.*

Pt 5103: *Yeah, okay.*

Rx 5103: *Within each 24 hours, you take it four times.*

Pt 5103»: *Four times, okay.*

c- The Context of Concordant Role Expectations

Both pharmacist and patient expressed s sense of role expectations which were been negotiated throughout. . In this study, our community pharmacists consistently checked if they were dispensing the correct and safe medications to patients. They were engaged in activities related to maintaining and improving patients' health by providing advice and information as well as assessing adherence and solving any drug-related problems. Patients, tended to indicate their acceptance of pharmacists' role as drug therapy experts but also asserted their own competence and autonomy needs in regard to self-management.

Challenges to these roles based activities could represent threats to the autonomy and/or competence needs of both the patients and the pharmacists. Two main challenges were identified within the context of interaction: (a) patient's non-adherence to treatment recommendation and (b) patient's reference to other authority. Pharmacists wanted to check that patients with chronic conditions would follow their drug regimens to achieve optimum health outcomes. To this end, pharmacists usually investigated how patients were using their medications. Exploring adherence indicators through questioning could present potential threats to the patients' autonomy or competence faces especially, if patients had alternative strategies for their medications. This may explain why pharmacists used leading closed questions while exploring how their patients were taking their medications (i.e., *"are you taking it in the morning?"* or *you are taking one every day?"*) In Face-Work Theory, leading and closed questions are typical ways to achieve solidarity, while also mitigating threats to competence face needs.

We had only one pharmacist who directly introduced the question of adherence after checking the benefits of the medication. In this interaction below, the patient had a refill prescription for her neuropathic pain. The patient provided a vague answer and the pharmacists then used a leading question.

Rx 2101»: *Aha..and how do you take it?*

Pt 2101: *Just like according to the directions.*

Rx 2101»: *one capsule three times a day?*

Pt 2101: *Yeah.*

In another instance, the pharmacist appeared to perceive the patient's claim of autonomy over his treatment activity as inappropriate. In the following extract, the pharmacist's warning was direct and explicit. The patient had a refill for his diabetic and cholesterol medications.

Rx 8102»: *So I noticed you didn't get your Crestor last time.*

Pt 8102: *Yeah.*

Rx 8102: *So anyways, you have to continue taking it because you need to take it with all the other medications <pause>*

Pt 8102: *Okay.*

Rx 8102: *because it's for cholesterol control.*

Pt 8102: *Okay.*

Rx 8102: *Okay? {…}*

The interaction started with a social act of expressing disapprobation and it was a threat to patient' competence face. The word (*"I noticed")* in past tense was a play-down to reduce the intensity of the disapproval. However, there was no leading grounder statement for this disapproval statement and the patient had minimum responses during the dyad such as ("*yeah, ok").* This implies that the pharmacist used conversational strategies such as giving reasons and upgrader word *"you"* to stress the importance and relevance of her warning. The patient's

minimum responses indicated his attempts to avoid further discussion that would implicate his autonomy and competence face. Lack of further responses had invited the pharmacist to terminate this topic.

In another example, patient's monitoring parameter (i.e. blood pressure) was optimal but she admitted that she had not taken her blood pressure medications for three weeks.

Rx 7105: *How's your blood pressure doing?*

Pt 7105: *Uh, it's okay today. Last week it was- but see I didn't take them for about three weeks. I know, I know, I know, I know! <laughter> I hate going to the doctor, you know that!*

Rx 7105: *I KNOW. He's done three months here, so you're good for a while now. Everyday, everyday, and if you miss, take as soon as you remember, because even if it's a couple of hours either way (yeah), you have to be sure.*

Rx 7105: *And the thing about blood pressure medicine is that we're looking at something long-term, so you miss one, meh. You start to miss two or three weeks, the pressure (yeah) (xxx) heart*

Rx 7105: *You just don't want to do that, right?*

Pt 7105: *I am with your (xxx)*

Rx 7105: *You kind of get the point, yeah.*

Pt 7105: *Yeah.*

The patient indicated her understanding of the inappropriateness of her autonomous action and offered explanation of her behaviour. This patient's social act of expressing guilt and responsibility included strategies to minimize the threat to her autonomy and competence face. The patient also tried to establish a mutual solidarity with the pharmacist by laughing and saying *"you know that"*. The pharmacist responded to this patient's fellowship face need by expressing her empathic understanding when she said, (*"I know")* louder compared to her usual voice. She also minimized the threat to the patient when she reminded her about the importance of adhering to blood pressure medication and presupposed the knowledge of patient cooperation in the future

when she said, "*You just don't want to do that, right?"* After both the pharmacist and patient confirmed their mutual agreement about role expectation, they moved to the next topic of conversation.

Pharmacists typically advised their patients in a direct and supportive manner and patients showed a willingness and intent to follow the pharmacist' advice. However, one patient resisted the pharmacists' advice in favour of their physicians' opinion. The next extract is from a pharmacist's interaction with a patient who had a refill for her oral contraceptive medication.

Rx 3103: *So I was just at a talk earlier in the week, they were talking about contraceptives.*

Pt 3103: *<murmured agreement>*

Rx3103: *Do you take them with a break or do you take them continuously?*

Pt3103: *I used to take them continuously, but I'm going back to the break. It became too irritating.*

Rx 3103: *A bit of a problem?*

Pt 3103: *Yeah.*

Rx 3103: *What was the problem? Was it just too <interruption>*

Pt 3103: *Just going off the cycle. Like it wasn't falling as it should (murmured agreement). And so, and that's just an inconvenience I do not need, <laughter> so.*

Rx 3103: *Okay. Wait, doesn't it, doesn't it come around whenever you stop, though?*

Pt 3103: *No.*

Rx 3103: *Oh, so there were, like periods (yeah) where it would just come to you?*

Rx 3103: *I think he mentioned something about that.*

Pt 3103: *So it's <interruption>*

Rx 3103: *He said <interruption>*

Pt 3103: *Yeah, I know that they say that you can do, like that can happen, but it just became too irritating for me to*

Rx 3103: *Too irritating. Yeah. You said he, this guy, this guy was like a doctor, like a gynaecologist, I think (murmured agreement) and he said, he liked recommending for his patients that they do, like 42 days and then 4 days off, not like, not (xxx).*

Pt 3103: *Oh, so not the normal one?*

Rx 3103: *Yeah.*

Pt 3103: *I'll have to ask my doctor. I have an appointment the next week, so.*

Rx 3103: *Something like that, it was just, it was interesting.*

Pt 3103: *I know my last doctor said I could do it continuously, but that was like last August, so I tried it but now I'm going back again, just 'cause <pause>*

Rx 3103: *Yeah, he said that not everyone can handle*

Pt 3103: *The side effects were more <pause>*

Rx 3103: *Yeah. He said that something like, basically like if you had it for too long, then it wasn't that you didn't have breaks, it just became that they would come at random times.*

Pt 3103: *Yeah, exactly.*

Rx 3103: *Like, yeah, the amount of breakthrough bleeding you had wouldn't add up to the same as if you just had a period.*

Pt 3103: *Some- yeah I would actually they would start a week earlier, yeah, and go a week later, so.*

Rx 3103: *Anyway, it was a good talk and he, what he was doing was interesting, so something <pause>*

Pt 3103: *Yeah, I'll have to ask my doctor about it and see if I can change around the time before I stop, start and stop that.*

Rx 3103: *Yes, yeah.*

At the beginning of the interaction, the pharmacist gave the pills to the patient and asked her about her experience with her contraceptive pills. After that, the pharmacist provided a preamble to legitimize the intent of the following question: "*so I was just at a talk earlier in the week, they were talking about contraceptives."* When the patient hedged indirectly that she had problems with the contraceptive, pharmacist asked an indirect question to mitigate the threat to the patient's competence face, ("*a bit of a problem?")* and the word *"a bit"* was understated to minimize the effect of the imposition of the question. The patient's minimum response led the

pharmacist to ask again in more direct question and patient explained her problems. The pharmacist showed his understanding about her problems and offered his sympathy to her by repeating what the patient said, *"too irritating"*. The patient asserted her autonomy when she said: "*I'll have to ask my doctor. I have an appointment the next week, so."* This patient act of resistance constitutes a threat to the pharmacist's own sense of competence. In response to that, pharmacist explained the advantage of following this advice and patient showed additional competence by explaining her knowledge and giving reasons for why she is not following the pharmacist's advice. This topic of conversation ended with the patient stating her intention to ask her doctor about the pharmacist's advice.

d-The Context of Discussing Sensitive Topic

Sensitive topics such as financial issues were raised and negotiated and may be perceived as a threat to the patient's and/ or pharmacist's autonomy and/ or competence face especially when it caused discomfort. In the following example, the patient had a refill for her contraceptive pill and she was asking for a less expensive product since she had some financial problems.

Rx 6103: Okay so you were asking about um a different <pause> <crumbling sounds>

Pt 6103: A generic brand

Rx 6103: A generic.

Pt 6103: A cheaper form

Rx 6103: Oh, you were just looking for something cheaper?

Pt 6103: Yeah.

Rx 6103: Okay, how is everything going with it?

Pt 6103: It's totally fine. I have no problems with it at all.

Rx 6103: Okay.

Pt 6103: *It's just, financially, since I don't have coverage*

Rx 6103: *Yeah. To tell you honestly, I don't know if a generic would really be that much cheaper.*

Pt 6103: *Oh really?*

Rx 6103: *Yeah, like, um, they're still, I mean it's still going to be probably $15 a pack, so, um and most of the other ones aren't that much cheaper either <pause>so. And especially if it's working well*

Pt 6103: *Yeah, I know, I know. I don't have (laughter) any problems with it that way.*

Pt 6103: *It's just financially right now.*

Rx 6103: *Yeah, I understand.*

Pt 6103: *But, you know, if I had coverage it would be*

Rx 6103: *Do you have coverage that's going to be kicking in soon?*

Pt 6103: *<sigh> No, I just started up my own company.*

Rx 6103: *Okay.*

Pt 6103: *So until I have enough money coming in to cover my other bills, that's kind of a last priority, I guess.*

Rx 6103: *Okay. Look and see if you can get Group 1 coverage through Alberta Blue Cross.*

Pt 6103: *Okay.*

Rx 6103: *It's, it's a type of, um, insurance that covers anybody who doesn't have coverage.*

Pt 6103: *Okay.*

Rx 6103: *And your rate is dependant on your income.*

Pt 6103: *Oh, okay.*

Rx 6103: *So they'll look at your income and if your income is little, then they don't charge you very much.*

Pt 6103: *Okay, and it's <pause>*

Rx 6103: *Yeah.*

Pt 6103: *My income is very little.*

Rx 6103: *No, definitely, definitely I would*

Pt 6103: *Cool. <crumpling sounds>*

Rx 6103: Give them a call and ask them about Group 1 coverage.

Pt 6103: Okay, definitely.

Rx 6103: I'll write that for you.

The social act of request was a threat to patient's own autonomy and competence faces. The pharmacist asked indirectly: "*Okay, how is everything going with it?"*- to minimize the imposition and to invite the patient to explain her reasons for this request. The patient answered honestly and comfortably, although her tone lowered when she mentioned her financial problems and the word (*"totally")* was an upgrader (overstated) that increased the force of her answer. Pharmacist heightened her agreement to this utterance when she used the word (*"Honestly")* and intensified her response with (*"really")*. The pharmacist's tone lowered while stating that there was no other less expensive contraceptive pill. The pharmacist's disagreement of the patient's request showed when she mentioned that the price is similar, the medication is effective, and there is no need to replace the medication. This disagreement led the patient to explain her problems again and insisting on her request. The pharmacist noticed this behaviour and that was perhaps why she laughed, trying to minimize the effect of this conversation on both of them. Afterward, pharmacist showed her desire to establish some sense of solidarity with the patient by demonstrating her sympathy: "*yeah, I understand"*. Later, when the patient hinted about her coverage plan, the pharmacist advised her about another insurance plan and the patient appreciated this advice and stated her intention to call the company.

e- The Context of Asserting Own Expertise and Knowledge

The respective expertise of pharmacists and patients needs to be acknowledged and supported to achieve mutual respect. Some patients showed that they were playing an active role in their health care and pharmacists complimented them. This social act of compliment was an example of an approbation strategy to support patients' competence face needs. The following is

an example of a female patient who had a new antibiotic prescription. When the pharmacist introduced the advantage of taking probiotics, the patient stated that she was already taking probiotics. Afterwards, the pharmacist offered her approbation and admiration of how well the patient was managing her lifestyle.

Rx 5101: *And..aha.. usually you would see signs of it is possibly diarrhea, which is one of the side effects that you often see with antibiotics, and one thing to do to minimize that is to increase your intake of probiotics, and these days there are a lot of foods, especially the yogurts, with the probiotics in them. So in <pause>*

Pt 5101 »: *I actually take probiotics, I do.*

Rx 5101: *Oh, perfect, so you're right on. So the probiotics will help you.*

Another patient interrupted the pharmacist and showed his competence in knowing how to store his inhaler. This was responded to with high approbation from the pharmacist *"perfect"*.

Rx 7104: *{...},This will ALWAYS work better, and last longer, if you keep it in the box, right?*

Pt 7104»: *Yeah, well that's why I brought (or close to) it back with the box, so I*

Rx 7104: *Perfect. {...}.*

Patients asserting their own expertise and knowledge may also challenge the pharmacist in establishing their therapeutic goals. Below is an extract of a pharmacist's interaction with a patient who had a refill for her hormonal replacement medication and vaginal tablet for vaginal dryness. The pharmacist started the interaction by stating the name of the medications and its strength, and patient had minimum responses during these utterances. The pharmacist then tried to draw the patient into the conversation by an invested question *("there's no questions or concerns?")* and the patient confirmed her own expertise. The pharmacist was sensitive to this patient's competence face needs and she acknowledged it but at the same time reminded her of a

pharmacist's expertise for providing assistance in any treatment issues (*"Okay, no problems. Remember, we're always here if you ever have any questions at all").*

Rx 6104: Yeah? There's no questions or concerns?
Pt 6104»: Aha no, I've been on this for a while. <crumbling sounds>

Rx 6104: Okay, no problems. Remember, we're always here if you ever have any questions at all. <crumbling sounds>

Pt 6104: Sure

In another dyad, the pharmacist and patient had different information about the dosage of the medication. The pharmacist used her authority of expertise to confirm the accuracy of the prescription. The patient challenged the pharmacist's competence based on her personal knowledge of the physician's instructions and she also introduced her friend into the conversation to support her knowledge claims ("*she's my witness")*. The pharmacist responded to this challenge with minimum threats in order to negotiate a sense of consensus with the patient before any possible breakdown occurred.

Rx 5101: -and then take it at four times a day.

Pt 5101»: She wants me to take two right off the bat.

Rx 5101: <u>Right off the bat.</u>

Pt 5101: Now, do I take it with meals or with food or without food?

Rx 5101: Well with..um

Pt 5101: I need to know that.

Rx 5101: It doesn't matter with this antibiotic.

Pt 5101: Okay.

Rx 5101: Aha—However, if, wh-when you do take it and it bothers your stomach, taking it with food will minimize that.

Pt 5101: Well I just had lunch, so I'll take two right now.

Rx 5101: Yeah, okay. On, on the prescription though that she wrote for me, right now, she only has you taking one, four times

Pt 5101»: No, she told me, she told me two. (She did..She did instruct you to take two, off the bat?). She's my witness.

Friend 5101: Yeah, she did, right off the bat.

Rx 5101: Okay. She failed to write that on the prescription. <laughter> Anyway, but, so yeah. So basically the four times a day and well, usually within 24 hours or 72 hours, if an antibiotic is the right one for you, you should notice some relief of your symptoms.

In summary, the main activities of community pharmacists are assessment of patients' information and teaching medications instructions during new prescriptions and exploring patients' experiences and self-management during refill prescriptions. Autonomy, competence and fellowship face needs were negotiated in the following contexts: participative relationship, concordant role expectations, sensitive topics, and expertise and knowledge. Figure 4.1 described the main types of threats to these three types of face needs and the main strategies that supported them. In our dyads, asking question and requests were major threats to both patient and pharmacist faces. Compliment and empathy supported competence and fellowship needs. Whereas, being indirect was the tact strategy that supported both the pharmacists' and patients' need for independence.

4.8. Discussion

Looking at the process of 25 patient-pharmacist interaction as they occurred has provided insight into face concerns within the main activities of pharmacist practice in community pharmacies. Pharmacists engaged in assessing patient knowledge, providing medication information, and investigating patients' medication use and self-management activities. Our results showed that pharmacists followed common communicative work patterns in their interactions with their patients. These macro-level patterns of pharmacist counselling were reflect other research findings (Puspitasari, Aslani, & Krass, 2009; Deschamps, Dyck, & Taylor, 2003). Most apparent face threats were mutual and occurred in several situations within

pharmacist-patient dyads. Among these situations are questioning around knowledge and self-management activities. It inherently threatens patients' competence and autonomy faces and it was manifested in form of questioning. Generally, pharmacists used closed leading questions and mitigated them with downgrades.

The interactional contexts with face implications reflect how the patient and the pharmacist approached each other to accomplish their instrumental goals and their reaction to the flow of events in the encounter. These findings support conceptualization of pharmacist-patient interaction as a two-way process, where both pharmacist and patient affect and are affected by each other (Gerbner, 1956; Goffman, 1967; Brown & Levinson, 1987). Patient-pharmacist interaction is much more than just advice and involves empathic understanding, and acceptance (Rees, 1996). In addition, these contexts present a much more complex view of pharmacist-patient communication (Spiers, 2002). The interactional goals identified in our contexts included desire for autonomy, competence, and fellowship for both the pharmacist and the patient. By using the concept of face, or claimed social image, we were able to explore how both pharmacist and patient continually balance solidarity with autonomy needs.

Pharmacists cooperated in communicating good intentions to the patients even if pharmacists continued to challenge or threaten some of the patients' needs. In some contexts, pharmacists attempted to avoid threatening the patients' indicated desire to be seen as competent and autonomous. For example, discussing non-adherence issues can be direct and explicit, whereas in other cases, pharmacists downgrade the force of the advice to minimize the imposition and gave deference to the patients' right to disagree with, to accept, or to refuse the advice. This is very similar to the communicative patterns found by Spiers (2002). In which nurses varied the directness and forcefulness of education and advice-giving when patients

responded with strong desire to protect competence and autonomy face. As in the research by Spiers (2002), we also found that pharmacists strove to provide information in a less threatening way unless it was important information that could not be ignored. In these cases, the pharmacists in our study increased the directness and force of statements and also expressed disapprobation towards patients' expressed autonomy. Essentially, tact and supportive communicative strategies were preferred to bold or direct communication. Conversely, physicians tend to display lower level of politeness while communicating with patients and patients' parents in pediatrics clinics (Yin, Kuo, & Huang, 2012). Differential in power between pharmacist and physician may explain why physicians had lower level of politeness.

Professional roles and power relations are also keys to understand the varying level of face work. Patients' desire to be seen as competent or autonomous in self-management was sometimes enhanced by pharmacists. This finding was supported by a study that found improved diabetes self-management by clinician autonomy support (Williams et al., 2005). Patient's attempt to save face was one of the major factors that affected non-adherence discussion (Watermeyer and Penn, 2012). In this study, a patient tried to distance himself from the situation and gave promises for future adherence to avoid further discussion about adherence (Watermeyer and Penn, 2012). There is a tension between pharmacists desire to support patients face and the instrumental task of gathering necessary information. If pharmacists avoid direct questioning and do not understand how patient under using a medication to lower blood pressure, this can result in the addition of an unnecessary blood pressure medication. These tensions may be one of the reasons pharmacists have not embraced open ended questioning techniques (Guirguis, 2011).

One of the main challenges to the pharmacists' attempt to counsel and give advice was patients' referral to higher authority of the physician. This patient resistance was also evident in

another study by Salter et al (2007) where patient resist pharmacists' advice through displays of knowledge and a calling of higher authority. Some patients viewed the physician as having the primary responsibility of counselling patients and monitoring medication use (Law et al., 2003) and this may explain why the pharmacists' advice was discounted and challenged

Mutual role expectations were important to have a collaborative pharmacist-patient relationship. Some researchers have found pharmacists and patients to have similar views about their roles (Worley et al., 2007), while others found that patients did not believe that pharmacists had a significant role in patients counselling and medication monitoring (Law et al., 2003). This is similar to Spiers (2002) who found for advice giving by nurses rejected by patients in favor of "wait to see what the Dr. recommend". This may explain why pharmacists' attempt to assert their competence and experience was threatened in our study.

Our results showed that the instrumental goals within the context of refill and new prescriptions differed. Patients with new prescriptions may have few questions and less experience with the medications; therefore, pharmacists tended to mainly instructed them didactically about how to use the medication and what they should expect from this medications and its side effects. In refill prescription situations, the pharmacists needed to evaluate patients' performance and achieved health outcomes. Thus, significant implications of face threats were found in these interactions. Interestingly, there seemed to be two major trends in the way pharmacists approached this. Some provide didactic instruction. While this does not reflect principles of patient centre care, it does have the advantage of been time efficient and the total focus on content rather than any face, did not seem to have any impact on the level of patient satisfaction on our survey results. Engaging patients by inquiring about the level of knowledge about the new medication facilitated tailored information-giving. But also presented the

possibility of face threats to the pharmacists' sense of competence and autonomy, especially if the patient reported physician instruction contrary to the pharmacist advice. In these situations, pharmacists endeavoured to balance and integrate the information while preserving their own violated competence face. Other study described pharmacists' perspective about medication monitoring and reported that there was a greater focus on new prescriptions versus refill counselling (Witry and Doucette, 2014).

Pharmacists anticipated patients' needs by asking directive questions. This social act is an invitation to draw the patient into the conversation and to open up and to turn to a topic of concern to them. For example, pharmacists usually asked about what the physician has told the patient to inform the next topic of conversation. Asking these type of questions can be perceived by both the pharmacist and the patient as containing threats within the contextual elements of the situation as indicated by Brown and Levinson (1987). However, the way of framing the question mitigates the level of face threat. In another study, pharmacists felt that asking these questions constitutes face threat for the pharmacist, as it appeared that the pharmacist may not know basic information about the medication (Guirguis, 2011).

Pharmacists may encourage patients to disclose their health concerns when they presented themselves in a caring, trustworthy, and respectful way through communicative strategies that acknowledge and support positive face needs for competence and solidarity and minimized face threats to all three dimensions of face. Self-disclosure whether intended or not intended and whether direct or indirect, can gradually deepen patient-pharmacist solidarity and trust as each patient exposes more personal information or layers of themselves to the pharmacists. It can also reflect the trust, liking, and familiarity for the pharmacist. Simultaneously, self-disclosure can also threatened patients' autonomy needs, especially when

they seek help. It was either directly or indirectly related to medications. As a response to patients' self-disclosure, pharmacists' will share their expertise and experience with these patients. In this data set, the pharmacists attended to the interactional needs of patients in order to strengthen solidarity and trust support as well as ultimately support patient-pharmacist relationship.

Research has found that patients remembered and understand less half of what clinician explained to them (Ley, 1989). Even if the appropriate counselling is provided, information is needed to demonstrate whether it is remembered, understood, and acted on. Interactions in community pharmacies are necessarily bound by the nature of the context. Patients often want to obtain the medication quickly, and pharmacists often have multiple people waiting for attention. Thus, the time available for any single interaction may be limited by external pressure, or expectations of either patient or pharmacist. Nonetheless, pharmacists try to ensure that patient comprehends the medication information that is needed to use the medication effectively and safely. Once this has been completed, pharmacists employ conventional signals to indicate the interaction is concluded. Typically, this included asking for a final time if there were any further questions. This appeared to occur as paper bags of medications are sealed and handed over to patients. Having this behaviour from pharmacist can be hardly noticed by patients as an invitation to ask more questions and not leave the counter.

4.9. Conclusion

Superficially, community pharmacist-patient interactions appeared to be entirely instrumentally in nature during the transfer of prescription and medications. Closes examination however, reveals the extent to what pharmacists work to effectively assess, monitor, and educate

patients about their medications and self-management strategies. In additional to these instrumental goals, patient and pharmacist interactions have an interpersonal dimension that addresses both patients' and pharmacists' need to maintain competence, autonomy, and solidarity face. Pharmacists use indirect question and less forceful communicative forms to mitigate face threats. Pharmacists too, experienced actual or potential threats to their competence and autonomy face when patients disregarded advice.

This study has explored and revealed typical patterns of community pharmacist-patient interactions and the kinds of face threats that are manifested within major interactive contexts. The results of this study may help to determine why and how pharmacist-patient interaction achieve both instrumental and interpersonal goals.

4.10. Limitations

The pharmacists in this study were self-selected and the pharmacists selected the patients. Thus, we had a selection bias and the results cannot be assumed to be relevant beyond this sample. However, our study primary purpose is not to generalize but to develop adequate description, interpretation and explanation of pharmacist-patient interactions. Similar studies could be conducted with different population and different settings. The addition of participants' perceptions of the counselling would be important in ethological approach to validate and interpret the data. This study has the strength of an external observation and analysis of the interaction, but is also limited by that wholly external view.

In addition, as a profession and culture, there are typical ways of relating, interacting and communicating and researcher's biasness was considered during the analysis process and discussed. One of the researchers who analyzed the data was from different country and culture.

There are interactional differences between cultures, thus something considered polite in one culture may not be in the other and it can be difficult to detect subtle cultural cues and references. Although the provision of pharmacy is developing in Kuwait and pharmacists in Canada have a greater range of professional roles, pharmacists' main role in both countries focused around dispensing and instructing patients about medications. Furthermore, similar patterns of significant power differential between pharmacists, patients and physicians exist To address these potential issues, the research team discussed biases this researcher could bring to the study and applied this information to analytic decisions.

Ecological validity is a potential limitation because the effect of participant's reactions to knowledge of being recorded is unknown. It is particularly crucial in studies of everyday social interaction (Spiers, 2000) and it is a primary limitation in this study. Participants may modify some aspects of their communication behaviour if they know they are being observed by maintaining awareness of the behaviour in conscious control (Mason & Redeker, 1993). Despite all of this, several studies found that videos had low degrees of observer effects as the participants became acclimatized to the presence of researcher or video camera (Kristjanson & Chalmers, 1990; Waltz, Strickland, & Lenz, 1991). In addition, Wiemann (1981) found that participants' initial anxiety reduces and stabilizes as they adjust to the environment. In support of the stability of pharmacists' communication, we found that pharmacists maintained characteristic behaviour patterns across recording with multiple patients. Furthermore, our research team assessed the data to be mostly "typical" of community pharmacist consultations. Nonetheless, this study had provided a unique insight into the interpersonal dimension of pharmacist-patient interactions.

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Table 4.1. Participants Demographics

Patient n=25	**Category**	**Number (%)**
Gender	Male	8 (32%)
	Female	17 (68%)
Education	< High school	1 (4%)
	High school	8 (32%)
	College certificate	7 (28%)
	University/college	4 (16%)
	Post-graduate	5 (20%)
Pharmacist n=10	**Category**	**Number (%)**
Graduation (missing = 1)	70s-90s	3 (33.3 %)
	2000s	6 (66.7 %)
Pharmacy Day (missing = 1)	Slow with Busy Times	5 (55.6%)
	Busy with Slow Times	3 (33.3%)
	Busy	1 (11.1%)
Position (missing = 1)	Owner/Manger	4 (44.5%)
	Staff	5 (55.6%)

Table 4.2. Patient Surveys completed after recording.

	N	Mean	Min	Max	Std. Deviation
Satisfaction	**25**	**6.04**	**3**	**7**	**1.12**
Pharmacy Expertise	**25**	**6.49**	**5**	**7**	**0.73**
Trust	**25**	**6.27**	**4**	**7**	**0.87**
Relationship	**25**	**5.95**	**3**	**7**	**1.17**

**Likert Scale: (1) Strongly agree (2) strongly disagree (3) disagree (4) neutral (5) agree (6) strongly agree (7) very strongly agree.*

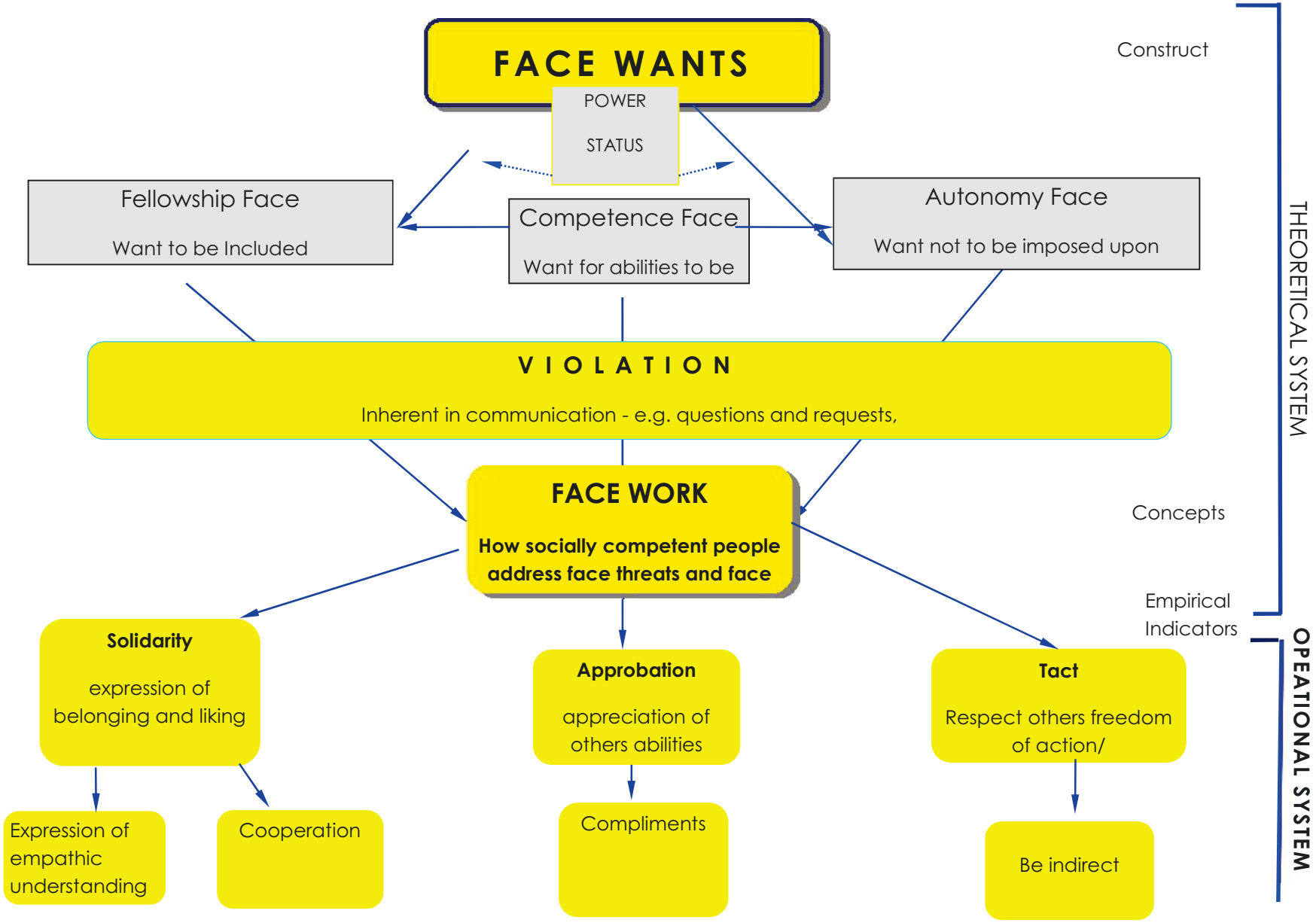

Figure 4.1. Solidarity, Approbation, and Tact in Patient-Pharmacist Interactions. A Substruction of Lim and Bowers (1991) Politeness Model. Adapted with permission from "The use of face work and politeness theory," by Spiers, J. A., 1998, *Qualitative Health Research, 8(1),* p. 36.

Chapter Five

Discussion and Future Directions

5.1. Discussion

In this chapter, I provide an overview of the main findings of this thesis and implications for practice, researchers, and educators. This thesis included three manuscripts. The first manuscript was meta-narrative review of recorded patient-pharmacist interactions. This review of the included 41 studies found that biomedical and patient centred communication focused research were framed within quantitative, qualitative methods, including conversational analysis. The 23 quantitative studies focused on the content of patient-pharmacist interaction whereas the five qualitative studies centred on specialized pharmacy practice, and 13 studies used conversational analysis to describe "how" patient and pharmacist interact. In this review, I found that 23 studies reflected dominant principles of a biomedical approach to pharmacy practice, whereas eight studies characterized a patient centred focus. Patient-pharmacist interactions were not consistently analyzed as a dyad. Non-specific thematic analysis was the predominant analytic approach in the qualitative studies. This growing body of research did not address the how the interpersonal side of patient-pharmacists interaction shaped the instrumental goals

The second manuscript identified limitations in recent pharmacy communication research and described how face-work theory could explain the effect of social context on patient-pharmacist interaction. Although the effect of patient-centred practice on improving health outcomes have been recognized, negative aspects in patient-pharmacist communication has also been identified such as patients' passive role and resistance to pharmacists' advice. The recent studies in patient-pharmacist communication did not examine the way patient-pharmacist

interaction is constituted through social processes nor investigate how respect, dignity, and autonomy affect patient-pharmacist interaction. Research is required to investigate pharmacists' preference to apply biomedical model during their interactions with their patients. Furthermore, the first manuscript in this dissertation described pharmacist-patient interactions as phases of information giving and asking questions. However, no study examine the communicative strategies used to negotiate and establish each phase.

In the third study, I used Brown and Levinson's (1987) model of politeness and Wood and Kroger's (1993) methodological approach for analyzing face-work in social interaction to explore 25 audio-recorded pharmacist-patient interactions. This study was novel in its use of the ethological approach to analyze the community pharmacist-patient communication process. In this paper, I described the behaviour patterns of patient-pharmacist communication in natural settings. I was able to illuminate the transactional communication values in patient-pharmacist interaction. The purpose of the study was to use face-work theory to gain an understanding of pharmacists' and patients' interpersonal responses as well as the communicative strategies they used to address actual or potential face threats implicated in working toward instrumental goals. The results described aspects of respect, competence and autonomy face that represent the social identity of both the pharmacist and the patient. There were differences in the degree to which pharmacists and patients negotiated and satisfied their face needs. The need for effective interpersonal communication may pose potential barriers to incorporating patient-centred care into routine practice. The main elements of patient-centred care are integrating the patient perspective into treatment discussion, active listening, asking open-ended questions, and verifying patient understanding (Montgomery et al., 2010; Watermeyer & Penn., 2009; Watermeyer, 2011; Watemeyer & Penn, 2009). These patient centred communication skills may

threaten to pharmacist' face, patient's face, or both within the case of an interaction. For example, verifying patients' understanding may threaten the patient's feelings of competence. Integrating patients' perspective into treatment discussion may threaten pharmacist's competence and patient's autonomy, especially when there is a disagreement on treatment options. In addition, asking open-ended questions about adherence may threaten patient's competence face. This may explain why pharmacists tended to use leading closed questions when investigating patients' medications use. Patients' display of knowledge and expertise may threaten pharmacists' attempt to address any drug-related problem and may explain how patients' expertise was disregarded by pharmacists (Salter et al., 2007).

Ignoring patients' face needs or misinterpreting patients' speech acts can lead to patient resistance, inappropriate actions, or a breakdown in interactions. Salter et al. (2007) found that patients often resisted pharmacists' advice when it conflict with their needs. In addition, role views between pharmacists and patients can lead to resistance. In the third study, patient resistance occurred were in there were incompatible views of role expectations.

Better pharmacist communication quality and greater patient satisfaction resulted when patient centred-skills were applied during counselling (Bentley et al., 2005; Paluck et al., 2003). In the third study, community pharmacists applied several elements of patient-centredness such as: creating openings for patients to express their concerns and showing empathic understanding. These results suggest that patient-centred skills can also be applied during patient counselling when a pharmacist acknowledges what can threaten a patient's face and understands how communication is directed by basic human needs such as people's need to be autonomous, part of a group, and seen as competent. This skill can be added to the list of activities in the patient-centred model of communication.

The biomedical model enhances the control and status of the pharmacist, whereas the patient-centred model enhances the control and status of the patient. However, patient-pharmacist communication is mutually constructed and balanced between these two parties. Pharmacists should recognize the need of balance in control between them and the patient. The next section describes how these results formed the bases for future directions in pharmacy practice research.

5.2. Future Directions

This dissertation could lead in a variety of directions. It is important to look at how the cultural assumption of roles, power, and social distance are operationalized, negotiated and managed in patient-pharmacist interactions. First, researchers can replicate this study in other pharmacy settings to gain the most comprehensive understanding of pharmacist and patient face-work strategies across different social and cultural groups. Researchers can also investigate how gender and age affect face-work strategies. In addition, researchers can investigate the impact of power and social distance on face-work strategies. The familiarity and liking between a pharmacist and patient, which is the function of the length of the relationship, can mitigate the effect of power differential. Pharmacists' power derived from their knowledge and experience of patients in similar situations. When there is difference in opinions, expectations and actions we will see differentials in power. Therefore, interviewing both the patient and the pharmacist will provide more information on the perceptions of the interaction in terms of goals, motivation, concerns, and consequences of interaction. Second, using different sources of data collection such as observation and interviews are important to obtain more comprehensive and detailed picture of the different dimensions of the communication that is, actual behaviour, perceptions and third party (researcher) observation. Patient and the pharmacist perceptions of the interaction and each other will vary according to its meaning and significance each attribute to the situation.

Future research may also explore why pharmacists and patients have structural differences in communication in differing contexts (e.g. new vs. refill prescriptions). Using these results, factors that may lead to threats to patients' face needs or influence patients' medication taking behaviours can be further defined. Educators can design certain interventions to improve pharmacists' awareness of patients' different face needs and the best possible ways to minimize threats to these needs. These skills can be added to repertoire of communication skills in the patient-centred model of communication.

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Appendix

Table A.1

Pharmacist	***Audio Recordings/Busyness 1(not busy)…7 (very busy***
1***100***	1100: (3), 2 RPH, 1 tech 1102: (1), 1RPH, 1 tech
2***100***	2101: (2), 1RPH, 1 tech
2***200***	2201: (4), 1RPH, 1 tech
2***400***	2401: (5), 1RPH, 1 tech
3***100***	3102: (2), 2 RPH, 2 Tech, 1 student 3103: (1), 2 RPH, 1 Tech, 1 student
4***100***	4101: (4), 1 RPH, 0 Tech 4103: (5), 1 RPH, 0 Tech 4105: (2), 1 RPH, 0 Tech 4106,7: (5), 1 RPH, 0 Tech
5***100***	5101: (5), 1 RPH, 2 Tech 5103: (6), 1 RPH, 2 Tech 5104: (4), 1 RPH, 2 Tech
6***100***	6101: (3), 2 RPH, 2 Tech 6103: (2), 2 RPH, 2 Tech 6104: (1), 2 RPH, 2 Tech
7***100***	7101: (5), 1 RPH, 1 Tech 7102: (3), 1 RPH, 1 Tech 7103: (5), 1 RPH, 1 Tech 7104: (4), 1 RPH, 1 Tech 7105: (4), 1 RPH, 1 Tech
8***100***	8102: (5), 1 RPH, 1 Tech 8104: (6), 1 RPH, 1 Tech

1101- Narrative Description (New Prescription/refill-6:42 min)

Description of participants:

Pt: 24 year old female with a college certificate degree with a refill for her asthma medications and a new prescription for an acne gel

Rx: Male manager in this pharmacy who was first licensed on 2002.

Description of the interaction:

The patient was picking up her medications. In this audio recording, the pharmacist started the counseling by a grounder that stats the intent of counseling by stating the name of her refill prescriptions. Pharmacist asked the patient if she had any questions about her refill medications and she did asked about how to use it. Pharmacist counseled the patients about how to use her medications and patient asked few clarifications questions but mostly she had minimum responses. There were background sounds of people taking. The conversation was relaxed and not rushed.

Post interaction measures (*Pt*):

Recall: 10/10

Satisfaction: 6/7

Pharmacy Expertise: 7/7

Trust: 7/7

Relationship: 4/7

Paralinguistic features:

Overlaps

Interruptions

My Interpretation:

In this dyad, pharmacist created an opportunity for the patient to ask questions at the beginning of the counselling. The pharmacist discussed medication instructions thoroughly.

1102- Narrative Description (New Prescription/refill-6:42 min)

Description of participants:

Pt: 37 year old male with a post graduate training degree with a new prescription for an antibiotic.

Rx: Male manager in this pharmacy who was first licensed on 2002.

Description of the interaction:

The patient was picking up his medications. In this audio recording, the pharmacist started the counseling by a grounder that stats the intent of counseling by stating the name of the antibiotic. Pharmacist then asked if the patient was familiar with this antibiotic before instructing the patient about how to take the medications and the side effects. Patient asked a clarification question and sometimes shared information spontaneously with the pharmacists. However, the patient voice was not clear during these moments and pharmacists had minimum responses in these moments. There were background sounds of people taking. The conversation was relaxed and not rushed. The patient had an accent.

Post interaction measures (*Pt*):

Recall: 10/10

Satisfaction: 3/7

Pharmacy Expertise: 5/7

Trust: 4/7

Relationship: 3/7

Paralinguistic features:

Overlaps

Interruptions

My Interpretation:

Rx threatened patient's autonomy when he asked about the type of infection he has.

2101- Narrative Description (Refill- 1:11 min)

In this interaction, the patient is 60 years old female with a refill for her Gabapentin medication. The pharmacist was a male and the owner/partner of independent pharmacy. He was first licensed as a pharmacist on 2006. He greeted the patient at the start of the interaction and addressed her by name. The dialogue was mostly about questions asked by pharmacist. Patient responded to all the question by mostly {Yes, No, Yeah} and only explained the reason of why taking gabapentin when the pharmacist asked her. The patient did not answer two questions on the recall surveys; how many refills do you have and how long should you take the medication. Patient's score on the surveys was: satisfaction=6, pharmacy expertise=7, trust=7, and relationship=7. There was no background sound of people except for the (shhhh) sounds. At the end of the interaction, there was crumpling sounds when the pharmacist said {Did you have any questions, concerns?} which in my opinion can be to patient' picking up the medication's bag or pharmacist was handing the bag to the patient.

2201-Narrative Description (Refill-4.2 min)

In this interaction, the pharmacist was male staff member in an independent pharmacy who was licensed in 2010. The patient was 47 year old male with a refill for his 3 medications and he had a post-graduate training. Pharmacist discussed medication names, purpose, direction and side effects. Patient answered pharmacist' s questions and sometimes shared information spontaneously. He answered all the recall questions (score10/10). His scores on the surveys were: satisfaction=7, pharmacy expertise=7, trust=7, and relationship=7.There was no background voices except for the cracking sound of the bag at the end of the interaction, when the patient picked up his medications. There were some silences (pauses), interruptions, and overlaps.

2401-Narrative Description (Refill- 6:12 min)

In this interaction, the pharmacist was a female staff member in an independent pharmacy, who was first licensed in 2000. The patient was 58 year old male with a refill for his 5 medication. He had a college certificate degree. Pharmacist assessed the effectiveness of the treatment and how the patient was taking his medications. Patient engaged in the interaction, answered pharmacist' s questions and shared information spontaneously. His score on the surveys was: (satisfaction=7, pharmacy expertise=7, trust=7, relationship=7. In this interaction, there were some cracking sounds at the beginning and the end of the interaction and some overlap, interruptions, and silences (pauses). There was a voice of man talking in the background, after the patient left.

3102- Narrative Description (Refill-2.41 min)

Description of participants:

Pt: 60 year old with a college certificate degree with a new prescription for Epi- pen.

Rx: is a male employer in this pharmacy who was first licensed on 2000th.

Description of the interaction:

In this interaction, the pharmacist just went through the direction of using Epi-pen with the patient, suggested holders to carry the pen and advised the patient about calling the umbelance once he has the reaction. Patient responded mostly with minimal responses but joked at the end with the pharmacist.

Post interaction measures (*Pt*):

Recall: 10/10

Satisfaction: 6/7

Pharmacy Expertise: 5/7

Trust: 5/7

Relationship: 5/7

Paralinguistic features:

Overlap

Pauses

The voice of both the pharmacist and the patient were clear. There were some background sounds of people taking, beeping, and cracking sounds but it did not affect my hearing of the conversation.

My Interpretation:

In my opinion, this interaction did not include any face threats issues that are relevant to my objectives.

3103- Narrative Description (Refill-2.41 min)

Description of participants:

Pt: 24 year old with a post-graduate training degree with a refill for her contraceptive medication.

Rx: is a male employer in this pharmacy who was first licensed on 2000th.

Description of the interaction:

At the beginning of the interaction, there were minimal responses from the patient and she seemed happy with her contraceptives. After that, pharmacist mentioned new information he got it from a gynecologist about the direction of taking contraceptive medication. During this suggestion, the patient described her problem, showed her expertise, and her future intention of asking her doctor about pharmacist's suggestion.

Post interaction measures (*Pt*):

Recall: 10/10

Satisfaction: 6/7

Pharmacy Expertise: 5/7

Trust: 5/7

Relationship: 5/7

Paralinguistic features:

Overlap

Interruptions.

Pauses

The voice of both the pharmacist and the patient were clear with only low tone from pharmacist at 00:27 sec. There were some background sounds of beeping and closing the bag but it did not affect my hearing of the conversation.

Analysis of interest (started at 00:36 sec till 2:12 min)

Rx: So I was just at a talk earlier in the week, they were talking about contraceptives.

Pt: <murmured agreement>

Rx: Do you take them with a break or do you take them continuously?

Pt: I used to take them continuously, but I'm going back to the break. It became too irritating.

Rx: A bit of a problem?

Pt: Yeah.

Rx: What was the problem? Was it just too-

Pt: Just going off the cycle. Like it wasn't falling as it should. And so, and that's just an inconvenience I do not need, <laughter> so.

Rx: Okay. Wait, doesn't it, doesn't it come around whenever you stop, though?

Pt: No.

Rx: Oh, so there were, like periods where it would just come to you?

Pt: Yeah.

Rx: I think he mentioned something about that.

Pt: So it's-

Rx: He said-

Pt: Yeah, I know that they say that you can do, like that can happen, but it just became too irritating for me to-

Rx: Too irritating. Yeah. You said he, this guy, this guy was like a doctor, like a gynecologist, I think and he said, he liked recommending for his patients that they do, like 42 days and then 4 days off, not like, not (xxx).

Pt: Oh, so not the normal one?

Rx: Yeah.

Pt: I'll have to ask my doctor. I have an appointment the next week, so.

Rx: Something like that, it was just, it was interesting.

Pt: I know my last doctor said I could do it continuously, but that was like last August, so I tried it but now I'm going back again, just 'cause-

Rx: Yeah, he said that not everyone can handle-

Pt: The side effects were more-

Rx: Yeah. He said that something like, basically like if you had it for too long, then it wasn't that you didn't have breaks, it just became that they would come at random times.

Pt: Yeah, exactly.

Rx: Like, yeah, the amount of breakthrough bleeding you had wouldn't add up to the same as if you just had a period.

Pt: Some- yeah I would actually they would start a week earlier, yeah, and go a week later, so.

Rx: Anyway, it was a good talk and he, what he was doing was interesting, so something-

Pt: Yeah, I'll have to ask my doctor about it and see if I can change around the time before I stop, start and stop that.

Rx: Yes, yeah.

Interpretation of analysis:

In this section of the interaction, the pharmacist gave reason for the intent of the following question and it was indirect statement. Patient responded and gave reasons for not taking the medication continuously and hedging that she had problems. Then, the pharmacist asked a question that threatened patient's autonomy face and the patient answered with minimal response and a vague one. This led the pharmacist to asked in more details and it was a direct question and the patient explained her problems and showed her expertise and knowledge. Pharmacists showed his understanding and sympathy to her. At the end of this section of the interaction, patient talked about her intention of asking her doctor about this pharmacist's advice.

4101- Narrative Description (Refill-1:59 min)

Description of participants:

Pt: 88-year-old male with post graduate training with a refill for his antihypertensive medication.

Rx: Male owner or partner in this independent pharmacy who was first licensed in 1994

Description of the interaction:

There was background sound of music. The conversation was relaxed and not rushed. Both pharmacist and patient voices were clear enough. Patient had a refill for his antihypertensive medication. Pharmacist started the counseling by a grounder, stating the name of medication and the difference in the delivery form. Patient appreciated pharmacist' explaining.

Post interaction measures (*Pt*):

Recall: 10/10

Satisfaction: 7/7

Pharmacy Expertise: 7/7

Trust: 7/7

Relationship: 7/7

Paralinguistic features:

Few overlaps

My Interpretation:

In my opinion, this interaction did not include any face threats that are relevant to my objectives.

4103- Narrative Description (Refill-1:59 min)

Description of participants:

Pt: 88-year-old male with post graduate training with a refill for his antihypertensive medication.

Rx: Male owner or partner in this independent pharmacy who was first licensed in 1994

Description of the interaction:

There was background sound of music. The conversation was relaxed and not rushed. Both pharmacist and patient voices were clear enough. Patient had a refill for his antihypertensive medication. Pharmacist started the counselling by a grounder, stating the name of medication and the difference in the delivery form. Patient appreciated pharmacist' explaining.

Post interaction measures (*Pt*):

Recall: 10/10

Satisfaction: 7/7

Pharmacy Expertise: 7/7

Trust: 7/7

Relationship: 7/7

Paralinguistic features:

Few overlaps

My Interpretation:

In my opinion, this interaction did not include any face threats that are relevant to my objectives.

4105- Narrative Description (New Prescription-8:11 min)

Description of participants:

Pt: 80-year-old female with college certificate with a new prescription

Rx: Male owner or partner in this independent pharmacy who was first licensed in 1994

Description of the interaction:

There were background voices of people talking. The conversation was relaxed and not rushed. Both pharmacist and patient voices were clear enough. Patient had a new prescription for nasal spray. Pharmacist started the counselling by a grounder, asking the patient if she used the medication before and what did the doctor say to her. Then he instructed her about how to use the nasal sprays and its side effects. Patient asked few clarification questions. Patient's daughter was with her during the counselling and she sometimes participated in the conversation.

Post interaction measures (*Pt*):

Recall: 10/10

Satisfaction: 7/7

Pharmacy Expertise: 7/7

Trust: 7/7

Relationship: 6/7

Paralinguistic features:

Few interruptions

One overlap

My Interpretation:

In my opinion, this interaction included very few face threats that are relevant to my objectives.

4106- Narrative Description (New Prescription-8:23 min)

Description of participants:

Pt: 73 old female with university degree and a new medication.

Rx: Male owner or partner in this independent pharmacy who was first licensed in 1994.

Description of the interaction:

The conversation was relaxed and not rushed. Pharmacist instructed the patient how to use the medication. He described the side effects.

Post interaction measures (*Pt*):

Recall: 8/10

Satisfaction: 7/7

Pharmacy Expertise: 7/7

Trust: 7/7

Relationship: 7/7

Paralinguistic features:

Repetition

My Interpretation:

Possible face threats.

4107- Narrative Description (New Prescription-8:23 min)

Description of participants:

Pt: 72 old male with postgraduate training

Rx: Male owner or partner in this independent pharmacy who was first licensed in 1994.

Description of the interaction:

Conversation was relaxed and not rushed.

Post interaction measures (*Pt*):

Recall: 7/10

Satisfaction: 6/7

Pharmacy Expertise: 7/7

Trust: 7/7

Relationship: 6/7

Paralinguistic features:

Overlaps

My Interpretation:

Possible face threats.

5101- Narrative Description (New Prescription-9:35 min)

Description of participants:

Pt: 77year old female with less than high school degree with a new prescription for an antibiotic

Rx: female employer in this pharmacy

Description of the interaction:

Pharmacist started the counseling calling the patient by her name and then stating the name of the medication and after that mentioning the name of the doctor who prescribed the medication. Then, the patient disagreed on the name and also disagreed on the dose given. Patient was engaging in this interaction by showing her competence and asking a clarification question about when to take the medication (with/without meals). She interrupted the pharmacist many times. There were some background conversation and also the patient talked with her friend when the pharmacist was bringing the antibiotic. Pharmacist voice was faint in some sentences and difficult to hear. Patient initiated the end of counseling. In addition, at the end of the interaction, there was some jokes and laughing between the pharmacist and the patient.

Post interaction measures (*Pt*):

Recall: 10/10

Satisfaction: 5/7

Pharmacy Expertise: 5/7

Trust: 5/7

Relationship: 4/7

Paralinguistic features:

A lot of interruptions

Few overlaps

My Interpretation:

In my opinion, when the patient disagreed with the pharmacist about the physician name and the dose directions, she threatened the pharmacist's competence face.

5103- Narrative Description (New Prescription-9:09 min)

Description of participants:

Pt: 40 year old female with a university degree with a new prescription for an antibiotic (clindamycin)

Rx: female employer in this pharmacy

Description of the interaction:

This patient has new prescriptions for an antibiotic and milk increasing medication. Both the voices of pharmacist and the patient were fainting in some moments and difficult to hear. The conversation was relaxed and not rushed. The patient repeated the instructions (sponatenous teach-back method) and asked few questions. She also had some minimum responses when the pharmacist instructed her. Both the patient and pharmacist laughed at the end. In addition, there was some side talks conversation between the pharmacists.

Post interaction measures (*Pt*):

Recall: 10/10

Satisfaction: 4/7

Pharmacy Expertise: 6/7

Trust: 6/7

Relationship: 5/7

Paralinguistic features:

Some overlaps

Some repetitions

My Interpretation:

Patient' competence face needs was noticed.

5104- Narrative Description (New Prescription-9:09 min)

Description of participants:

Pt: 82-year-old female with a high school degree with an OTC medication for arthritis

Rx: female employer in this pharmacy

Description of the interaction:

In this interaction, the patient asked the pharmacist about an Over the Counter Medication for arthritis. The conversation was relaxed and not rushed. This pharmacist (5100) stuttered and said a lot of aha—while she talked. Patient showed a gratitude for asking pharmacist's advice about her stiff neck since she did not have to go to the doctor to wait for hours. They both joked about this issue. In addition, pharmacist gave compliment to the patient at the end about how she controlled her diabetes and they also joked about how much the patient lost weight and how much she should gain back.

Post interaction measures (*Pt*):

Recall: 10/10

Satisfaction: 6/7

Pharmacy Expertise: 6/7

Trust: 6/7

Relationship: 5/7

Paralinguistic features:

Some overlaps

Some interruptions

My Interpretation:

In this interaction, I did not find any face threats issues. I noticed this pharmacist stuttered a lot on her 3 audio recording and said aha—a lot. Her voice sometimes is low but I can hear it. She did not have the same rituals ending in her conversations. She offered a lot of appeal to solidarity and appreciated patient's competence.

6101- Narrative Description (Refill-0:39 sec)

Description of participants:

Pt: 51 year old female with a college certificate degree with a refill for her antidepressant medication.

Rx: female employer in this pharmacy who was first licensed on 2000th.

Description of the interaction:

At the beginning of this interaction, there was some laughing and talking between the pharmacist and the patient. I am not sure what they were talking about. It was not clear. The talk was rushed and patient had minimal responses to the pharmacist question. Pharmacist repeated patient' s minimum responses. Pharmacist laughed at the end and she seemed happy with the patient' responses although she repeated it like a question.

Post interaction measures (*Pt*):

Recall: 10/10

Satisfaction: 6/7

Pharmacy Expertise: 7/7

Trust: 5/7

Relationship: 6/7

Paralinguistic features:

One interruption

More than one repetition.

My Interpretation:

When the pharmacist's talk was clear. It was a grounder; stating the purpose of this counseling. She assessed patient's experience with her medication and although the patient seemed satisfied with her medication. The pharmacist repeated the patient answers like a question. In my opinion, she want to be sure of the patient answers or she was encouraging the patient to talk more. Therefore, in my opinion, this interaction included threats to patient's autonomy and competence face.

6103- Narrative Description (Refill-2:01 min)

Description of participants:

Pt: 23 year old with a high school degree with a refill for her contraceptive pill and she was asking about something cheaper since she had some financial problems.

Rx: female employer in this pharmacy who was first licensed on 2000th.

Description of the interaction:

In this interaction, the patient asked for another contraceptive pill that is cheaper since she had some financial problems. Pharmacist did not suggest any different generic one since there was no much difference in the price. Then she advised the patient about another insurance plan for people with low income and the patient seemed satisfied. During the talk, there was some background sounds of people talking and crumbing sound, but it did not affect my hearing of the conversation and the voice of both the pharmacist and the patient were clear. However, patient's tone became a bit lower when she talked about her financial problems. In addition, when pharmacist stated that there was no other much cheaper contraceptive pill, her tone lower.

Post interaction measures (*Pt*):

Recall: 10/10

Satisfaction: 7/7

Pharmacy Expertise: 7/7

Trust: 6/7

Relationship: 6/7

Paralinguistic features:

Overlap laughter

Repetition

Stuttering

Pauses

Analysis of Interest (00:12 sec-1:30 min)

Rx: *Oh, you were just looking for something cheaper?*
Pt: *Yeah. <laughter>*
Rx: *Okay, how is everything going with it?*

Pt: *It's totally fine. I have no problems with it at all.*
Rx: *Okay.*
Pt: *It's just, financially, since I don't have coverage it's-*
Rx: *Yeah. To tell you honestly, I don't know if a generic would really be that much cheaper.*
Pt: *Oh really?*
Rx: *Y e a h , like, um, they're still, I mean it's still going to be <pause> probably $15 a pack, so…um and most of the other ones aren't that much cheaper either, so <pause>. And especially if it's working well-*

Pt: *Yeah, I know, I know. I don't have any problems with it that way.*
Rx: *<laughter>*
Pt: *It's just financially right now.*
Rx: *Yeah, I understand.*
Pt: *But, you know, if I had coverage it would be-*
Rx: *Do you have coverage that's going to be kicking in soon?*
Pt: *<sigh> No, I just stared up my own company.*
Rx: *Okay.*
Pt: *So until I have enough money coming in to cover my other bills, that's kind of a last priority, I guess.*
Rx: *Okay. Look and see if you can get Group 1 coverage through Alberta Blue Cross.*
Pt: *Okay.*
Rx: *It's, it's a type of, um, insurance that covers anybody who doesn't have coverage.*
Pt: *Okay.*
Rx: *And your rate is dependant on your income.*
Pt: *Oh, okay.*
Rx: *So they'll look at your income and if your income is little, then they don't charge you very much.*
Pt: *Okay, and it's-*
Rx: *Yeah.*
Pt: *My income is very little.*
Rx: *No, definitely, definitely I would-*
Pt: *Cool. <crumpling sounds>*
Rx: *-give them a call and ask them about Group 1 coverage.*
Pt: *Okay, definitely.*
Rx: *I'll write that for you.*

Interpretation of Analysis:

The social act of requesting something cheaper because of the financial problems was a threat to patient's autonomy and competence face. I noticed that pharmacist asked indirectly for the reasons for this request which the patient answered honestly and comfortably, although, her tone lower when she mentioned her financial problems. Furthermore, when the pharmacist mentioned that the price is similar, and the medication is effective, and there is no need to replace the

medication, it was, in my opinion, a disagreement to the patient's request, which led the patient to explain her problems again, and insisting on her request. I think pharmacist noticed this and that's why she laughed, trying to minimize the effect of this conversation on both of them. Later, when patient hinted about her coverage plan, pharmacist advised her about another insurance plan and patient appreciated this advice and seemed willing to call the company.

6104- Narrative Description (Refill-1.23 min)

Description of participants:

Pt: 51 year old female with a college certificate degree with a refill for her hormonal replacement medication and vaginal tablet (estradiol) for vaginal dryness.

Rx: female employer in this pharmacy who was first licensed on 2000th.

Description of the interaction:

The patient was picking up her medications in addition to other person's medication. Patient had minimal responses and pharmacist just asked her about her experience with the medication and patient answered saying that she did not have any problems with it since she was taking them for a while.

In this interaction, there were some background sounds but it did not affect my hearing of the conversation. Pharmacist was a bit rushed at the end of the interaction. At the end of the conversation, pharmacist laughed in response to something patient said but it was not clear.

Post interaction measures (*Pt*):

Recall: 10/10

Satisfaction: 7/7

Pharmacy Expertise: 7/7

Trust: 7/7

Relationship: 6/7

Paralinguistic features:

Overlap

Interruption

My Interpretation:

In this interaction, patient showed her competence when pharmacist assessed her experience with her medications and asked her if she had any questions or concerns. Patient gave reasons for this response since she was on this medication for a while now.

7101- Narrative Description (Refill-2:48 min)

Description of participants:

Pt: 84-year-old male with a high school degree

Rx: female employer in this pharmacy who was first licensed on 1988.

Description of the interaction:

In this audio recording, patient had a refill for blood pressure, diabetes, and thyroid medications. The patient complained about her physician's movement and she may not be able to go to his clinic and pharmacist offered suggestions. But the patient showed her competence about planning to see her physician.

Post interaction measures (*Pt*):

Recall: 10/10

Satisfaction: 7/7

Pharmacy Expertise: 7/7

Trust: 7/7

Relationship: 7/7

Paralinguistic features:

Overlaps

My Interpretation:

There was some face threats when the pharmacist asked the patient her blood pressure and any additional symptoms she had.

7102 - Narrative Description (Refill-00:52 sec)

Description of participants:

Pt: 62 year old male with a high school degree with a refill for his chloersterol and antihypertensive medications.

Rx: female employer in this pharmacy who was first licensed on 1988.

Description of the interaction:

The patient was picking up his medications. In this audio recording, the pharmacist started the counselling by a grounder that stats the intent of counselling (patient is pick up his medications). Then, the pharmacist asked the patient about his cholesterol level, which is in my opinion, was nondirect question to address any non-adherence issues or to assess the patient's condition. The patient answered honestly admitting she/he did not check it for a while. However, he was hesitant at the beginning. The pharmacist's response was an appreciative one. Although the pharmacist's response was an appreciative ones, she continued asking another question. In this audio recording, the pharmacist ends the counselling by suggesting that she will see the patient next time. In my opinion, the pharmacist showed a solidarity appeal, which the patient acknowledged and accepted. There was some background sounds of people talking and crumbling sounds but it did not affect my hearing.

Post interaction measures (*Pt*):

Recall: 10/10

Satisfaction: 5/7

Pharmacy Expertise: 6/7

Trust: 5/7

Relationship: 5/7

Paralinguistic features:

No paralinguistic features were found.

My Interpretation:

In this audio recording, when the pharmacist asked the patient about his cholesterol level, it was a threat to patient's autonomy and competence face.

7103 - Narrative Description (Refill-2:01 min)

Description of participants:

Pt: 72 old female with college certificate

Rx: Rx: female employer in this pharmacy who was first licensed on 1988.

Description of the interaction:

The dyad was relaxed not rushed and there was some social talking.

Post interaction measures (*Pt*):

Recall: 10/10

Satisfaction: 6/7

Pharmacy Expertise: 7/7

Trust: 7/7

Relationship: 5/7

Paralinguistic features:

Interruptions

My Interpretation:

Possible threats to the patient's competence face needs.

7104- Narrative Description (New Prescription-2:01 min)

Description of participants:

Pt: 80-year-old male with a university degree for a ventolin.

Rx: female employer in this pharmacy who was first licensed on 1988.

Description of the interaction:

In this audio recording, patient has a new prescription for an inhaler (ventolin). The voices of both the pharmacist and the patient were clear. The conversation was not rushed. Patient showed her competence about how to store the medication. Pharmacist instructed the patient about how to use the medication.

Post interaction measures (*Pt*):

Recall: 10/10

Satisfaction: 7/7

Pharmacy Expertise: 7/7

Trust: 7/7

Relationship: 7/7

Paralinguistic features:

Interruption

Overlaps

My Interpretation:

There was some face threats when the pharmacist asked the patient about any additional symptoms she had.

7105- Narrative Description (New Prescription-2:48 min)

Description of participants:

Pt: 56-year-old female with a university degree

Rx: female employer in this pharmacy who was first licensed on 1988.

Description of the interaction:

In this audio recording, patient had a new prescription for Tylenol 3 for her back pain and a refill for her blood pressure medication. Pharmacist asked her about her blood pressure and patient admitted she did not take her medication for a while now. Pharmacist reminded her about the instruction and warned her about the consequences of her non adherence. Then she instructed her aboit Tylenol 3 and its side effects. The were some crumbling sounds and background sounds of people talking but it did not affect my hearing or the conversation because the conversation was relaxed and not rushed.

Post interaction measures (*Pt*):

Recall: 9/10

Satisfaction: 7/7

Pharmacy Expertise: 7/7

Trust: 7/7

Relationship: 7/7

Paralinguistic features:

Overlaps

My Interpretation:

There was some face threats when the pharmacist asked the patient her blood pressure and patient admitting she did not take her blood pressure medications for a while now.

8102-Narrative Description (Refill-0:58 sec)

In this interaction, pharmacist was female. She is the owner/partner of this independent pharmacy. She was licensed on 1971 . The patient was 51 year old male with a refill for his diabetic and cholesterol medications and he also picked up his wife medications. Pharmacist warned the patient about not picking up his cholesterol medication on the last refill and gave reasons for her warning. There were minimum responses from the patient during the interaction such as yeah, ok. Pharmacist started the interaction by addressing the issue of not taking the cholesterol medication on the previous refill. There was a short pause from the pharmacist at the end of this statement and the patient just said "yeah". She then gave her warning and supported it with reasons. The following pauses were for taking breath and the patient gave his minimum response as a signal he is listening. There wan no overlap, interruption or repetition. There were some background voices but both pharmacist and patient voice were clear enough. There was some cracking sound during pharmacist' talk. Patient was satisfied with the pharmacy services (survey score). However, he had poor recall on these questions: name of the medication, when will this medicine start working, for how long should you take this medicine, and special Precaution. But the pharmacist did not discuss these issues.

8104-Narrative Description (Refill-3:46 min)

Both pharmacist and patient are females. Patient has less than high school education and was 49 years old female. Patient has a refill of anti-inflammatory medication for her gout. In this interaction, the pharmacist did most of the talking. Patient was giving minimal responses as a signal for her attention and listening to the pharmacist' s instruction about the medication. Then patient asked question about medication interaction because she is taking hormone medication. After explaining the medication, then pharmacist spends a few minutes helping the patient with where to look for a family physician and there was another person (either pharmacist or technician) who participated in the conversation about the name of the physician and the direction. There was a long pause at the beginning of the interaction (after the research assistant talked). The voice of the patient changed during the interaction. There were crumpling sounds during the talks. When the pharmacist was explaining the direction of a clinic to the patient, there were some background voices (a man was talking). Patient did not fill the recall question but her scores on the survey were: satisfaction=6, pharmacy expertise=6, trust=5, relationship=5.