An Exploration of Pharmacist-Patient Communication in Clinic-Style Consultations

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Abstract

The importance of communication skills for pharmacists has been widely acknowledged. Research has shown that the use of good communication skills can improve patient health outcomes but little research has focussed on communication within new consultation based roles of pharmacists. This study aimed to explore the communication between pharmacists and patients in clinic style consultations and to investigate participant perceptions of communication and consultations.

Eleven pharmacists were recruited to the study and were responsible for the recruitment of patients from their own practice; five pharmacists recruited a total of 18 patients. A semi-structured interview was conducted with each pharmacist and with each patient before and after their consultation. Consultations were audio-recorded and observed and all recordings were transcribed verbatim. Thematic analysis based on the principles of grounded theory was conducted. Consultations were additionally coded according to the Calgary–Cambridge guide. NHS Ethics and local research and development approvals were obtained.

The data show that patient reports of communication skills during consultations can lack detail, indicating that actual consultation data is required in order to assess communication skills. Pharmacists reported a lack of communication skills training and stated that additional training would need to be focussed on specific, relevant skills and should involve underpinning theory combined with observation of practice and personalised feedback.

Pharmacists observed in this study used of a variety of methods for structuring consultations including official computerised or paper based forms, rehearsed segments of speech, and mental checklists. Some difficulties in using computers in a way that did not interfere with communication were identified. Further training may help pharmacists to more effectively structure their consultations.

The participants reported that location has important effects on the communication within consultations. Both pharmacists and patients valued privacy in enabling open and honest consultations, particularly in community pharmacy. While it was reported that infrequent use of consultation rooms can lead to stigma being associated with private consultations, the data suggest that having a dedicated space for pharmacist-patient consultations is important.

Application of the Calgary-Cambridge guide to recorded consultations showed good usage of many of the skills by the study pharmacists but skills linked to creating a patient centred consultation were under-represented. Some data did not correspond to a specific skill within the guide. Analysis showed the key theme of social conversation, which is essential for relationship building, was present in the non-coded data. Building up a relationship was reported by both pharmacists and patients as important in facilitating communication and that trust in particular played an important part in achieving successful consultations.

The study methods enabled collection of rich data about pharmacist-patient communication. The data show that many factors can influence communication within consultations including pharmacist training, location, relationships, structure and use of computers. Pharmacists may need to think widely when aiming to achieve effective consultations. The data suggest that pharmacists made good use of communication skills during consultations but could improve use of the skills that create patient-centred consultations. The Calgary-Cambridge guide could be used to focus both training and research in this area.

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Contents

List of Tables

List of Figures

Abbreviations and Acronyms

C-C Guide	Calgary-Cambridge Guide to Consultations
CPPE	Centre for Pharmacy Postgraduate Education
EHC	Emergency Hormonal Contraception
GP	General Practitioner
MCA	Medicines Counter Assistant
MUR	Medicines Use Review
NHS	National Health Service
OSCE	Observed Structured Clinical Examination
PGD	Patient Group Direction
PMR	Patient Medication Record
PPR	Pharmacy Practice Research
RPSGB	The Royal Pharmaceutical Society of Great Britain
UK	United Kingdom
US	United States

Chapter 1.Introduction

1.1 Introducing the Study

> *"Words are, of course, the most powerful drug used by mankind"*
>
> *(Rudyard Kipling)*

This quote from Rudyard Kipling outlines the importance of communication and within healthcare, good communication is essential. Whilst there is great variation in the tasks and roles that pharmacists deliver, a key skill that underpins them all is to be an effective communicator. The specific communication skills required may differ with changing contexts but the importance of successful communication remains the same; to work effectively as a pharmacist it is essential to communicate well with patients (Shah 2004).

Communication is part of daily life and occurs in a wide variety of forms and contexts. In most situations, communication is not at the forefront of our mind and we are not working hard to decide how and what to communicate. There are, however, many circumstances in which more specialist communication is required and this can take a great deal of effort to get right; pharmacy practice is an example of such a situation. There are a number of factors that can make effective communication in healthcare, including pharmacy, more important and yet more difficult to achieve. These include the frequent mismatch in knowledge between the health care professional and the patient which can lead to an imbalance of power during the interaction (Dickson, Hargie et al. 1997), the often complicated instructions or information regarding treatment or conditions involved (Silverman, Kurtz et al. 2005), and the sometimes difficult and emotional nature of discussions of a person's health.

According to the Royal Pharmaceutical Society of Great Britain (RPSGB), a pharmacist is an expert in medicines and can work in any aspect of the use of medicines, from discovery and preparation to use by patients and treatment monitoring (The Royal Pharmaceutical Society of Great Britain 2010). This broad definition begins to describe some of the large number of roles undertaken by pharmacists in the UK and internationally today. Pharmacists can work in many sectors including community pharmacy, hospital pharmacy, primary care, the pharmaceutical industry and academia and the majority of pharmacists work in either primary care, hospital or community pharmacy. These sectors are often described as pharmacy practice and it is in these roles that pharmacists interact with patients as a medicines expert.

Pharmacists work in a range of capacities within these sectors fulfilling a number of roles and providing a wealth of different services. The number of services that pharmacists provide has increased as the profession has developed the roles of pharmacists within the UK healthcare system (Chen and Britten 2000; Badger, Mullis et al. 2007; Cleland, Bailey et al. 2007; Gray, Celino et al. 2009; Weiss and Sutton 2009).

The importance of communication skills for pharmacists has been widely acknowledged for many years, both in the UK and internationally, by professional bodies (Bellingham 2004; The Royal Pharmaceutical Society of Great Britain 2007), individual pharmacists (Shooter 2004) and researchers in pharmacy practice (Dickson and Rodowskas 1975; Morrow and Hargie 1986; Pronk, Blom et al. 2002; Lyra Jr, Rocha et al. 2007).

Research has shown that the use of good communication skills by health care professionals, including pharmacists, can ultimately improve patient health outcomes (Barry, Stevenson et al. 2001; Boardman and Fitzpatrick 2001; Booij, De Boer et al. 2003; Stevenson, Cox et al. 2004; Silverman, Kurtz et al. 2005). Improving communication can facilitate patient participation in consultations through patient-centred care (Stewart, Belle Brown et al. 2000; Worley 2006), improve patient understanding of the illness or treatment (Coulter and Ellins 2007) and help patients to take control of their care through management of medications (Fisher 1992) and lifestyle changes (Bottorff 2006). However, many of the problems reported in 1975 by Dickson and Rodowskas, such as the need to improve pharmacists' communication skills in order to achieve patient-centred care, are still faced today.

The increasing roles of pharmacists have resulted in confusion for some patients (Chewning and Schommer 1996). Patients can be unclear about the services that pharmacists are able to offer and this can result in patients not accessing these services. National programmes have been introduced to help raise awareness of the roles of pharmacists; for example, Ask About Medicines week encourages patients to ask their pharmacist for medication related information and advice (Bellingham 2006). If patients are to benefit from the best health care, it is important that they know how, where and from whom to access health services.

In order to help patients receive high quality health care it is important to establish how communication skills are currently used in pharmacist-patient interactions. Little research has focussed on communication specifically within new pharmacy roles that centre on patient consultations, and studies in this area would be pertinent. In addition, patient awareness of these roles and their perceptions of pharmacist communication have not been extensively explored. Such research may facilitate development of services that meet patient needs and that are conducted by pharmacists who are able to effectively communicate with their patients.

1.2 Aims and Objectives

This study aims to explore the communication that occurs between pharmacists and patients during clinic-style consultations. That is, appointment-based consultations where both participants are aware of the reason for the consultation in advance. The study employs qualitative methods including semi-structured interviews with pharmacists and patients, non-participant observation and audio-recording of consultations in order to discover what happens during consultations with regard to communication, and how the participants perceive the communication. The specific objectives of this study are:

1. To explore the communication that occurs during pharmacist-patient clinic-style consultations and to examine the communication skills used by pharmacists within these interactions.

2. To investigate pharmacists' views of the learning and use of communication skills within pharmacy, particularly with patients.

3. To investigate patients' perceptions and experiences of pharmacy.

4. To investigate patients' perceptions of their consultation to include aims, expectations and outcomes and particularly to explore patients' perceptions of the communication within the consultation.

This study provides an in depth understanding of the communication within pharmacist-patient interactions and of participant thoughts about this communication.

1.3 Organisation of the Study

This study is divided into seven chapters. The current chapter (Chapter 1) describes the background of the study and presents the aims and objectives. Chapter 2 reviews the literature on pharmacist-patient communication, including how communication has been assessed within previous research studies, the roles of communication within pharmacy and the influences on communication.

Chapter 3 describes the methodology and methods underpinning this study. The choice of qualitative methods is explained and issues of validity and reliability are discussed. The data collection process and methods of analysis are given in detail.

Chapter 4 presents the pharmacists’ perceptions of the role of communication skills within pharmacy, with particular reference to communication with patients, the learning of communication skills and influences on communication skills in practice.

Chapter 5 describes the patients’ perceptions and expectations of pharmacists and pharmacies in everyday encounters. The patients’ thoughts regarding their consultation are also presented, including influences on patient participation in the consultations and the impact of environment on communication.

Chapter 6 presents analysis of the pharmacist-patient consultation data. Thematic exploration of the use of tools to provide structure and the impact of information technology on the consultation are discussed. Chapter 6 also describes the application of the Calgary-Cambridge Guide to the pharmacist-patient consultations and analysis of the communication skills used within these consultations.

Chapter 7 concludes the study and presents a summary of the key findings and takes a reflexive look at the study process. The strengths and limitations of the study are described and the implications for future practice, teaching and research are discussed.

The next chapter presents a review of the current literature on pharmacist-patient communication.

Chapter 2. Literature Review

2.1 Introduction

Research into the practice of pharmacy has become an important and widely published field of study from its small beginnings in the late 1970s and early 1980s. A number of developments, including the concept of the 'extended role' of pharmacists, have prompted the growth of this research area. Pharmacy practice research began by exploring the changing roles of pharmacists, such as undertaking diagnostic testing or advising GPs. Nicholas Mays' 1994 report commissioned by the Pharmacy Practice Research Resource Centre at the University of Manchester reviewed pharmacy practice research from an external viewpoint, that of a health services researcher. Mays outlined a number of areas that he felt needed addressing to fill the gaps in pharmacy practice research as he found them in 1994. This included studying the day to day relations between pharmacists and other healthcare professionals and the observation of pharmacist – client relations in order to identify the dynamics of the interactions, including communication (Mays 1994).

The importance of communication skills for healthcare professionals, including pharmacists, has been widely acknowledged, both in the UK and internationally, for many years (Dickson and Rodowskas 1975; Morrow and Hargie 1986; Tindall, Beardsley et al. 1994; King, Schommer et al. 1998; Kansanaho, Isonen-Sjolund et al. 2002; Maguire and Pitceathly 2002; Pronk, Blom et al. 2002; Bernardini, Ambrogi et al. 2003; Silverman, Kurtz et al. 2005; Kotegawa 2007; Lyra Jr, Rocha et al. 2007). Dickson and Rodowskas wrote in 1975 about many of the challenges that we still face today. For example, that pharmacists must improve their communication skills with increased training in order to reach the goal of patient centred care, and if pharmacists are to be given increased roles, for example, in the management of long term health conditions, they must earn them by showing this improvement in communication (Dickson and Rodowskas 1975). It has also long been recognised that non-verbal communication plays an extremely important role in the consultation process, for example, in 1979 it was found that subjects had a more positive attitude towards a pharmacist when they were not behind a barrier or counter, when they were at eye level and when they were closer to the subject (Ranelli 1979).

Today communication both with patients and between healthcare professionals has been shown to affect patient care, for example, in the continuity of care (Booij, De Boer et al. 2003) or interventions to reduce errors (Boardman and Fitzpatrick 2001). The Royal Pharmaceutical Society (RPSGB) has recently acknowledged the importance of communication skills when reviewing the core skills, knowledge, attitudes and behaviours that make pharmacists competent (Burke 2007). In addition practising pharmacists acknowledge the importance of communication skills by devoting time to research (Hargie, Morrow et al. 2000). This review will attempt to examine how pharmacy practice research relating to communication has moved forward from early pharmacy practice research, to show how important communication skills are within pharmacist-patient interactions and the implications for current practice.

The search strategy used can be seen in appendix 1. Only those publications related to pharmacist-patient communication were included as inter-professional communication is outside the scope of this thesis.

This review will first explore research about the assessment of communication skills in the literature and will then move on to learning of communication skills. This chapter will then discuss the role of communication skills in pharmacy and then the factors that influence pharmacist-patient communication and will conclude by presenting the gaps in the current published literature.

2.2 Assessing Communication Skills

Various methods have been used to assess the communication skills of pharmacists. Much of the current pharmacy practice research regarding communication skills has been aimed at describing what happens when pharmacists are communicating with patients, usually quantitatively; for example, is information regarding side effects given (Laurier, Archambault et al. 1989; Ortiz, Walker et al. 1989; Alkhawajah and Eferakeya 1992; Morrison and Wertheimer 2001; Puumalainen, Peura et al. 2005; Lyra Jr, Rocha et al. 2007).

A review of the literature on pharmacist – patient communication in North America from 1969 -1994 showed that of the 40 studies reviewed, only three directly observed the communication occurring. The remaining studies used pharmacist or patient reports, or made use of 'secret shoppers' which all rely on recall of the communication after the event (De Young 1996b). The importance of direct measurement of communication skills has been highlighted more recently by findings that the perceptions of doctor communication within a consultation vary considerably, both between the patient and the doctor, and between multiple patients seeing the same doctor. This suggests that participant assessment is not a reliable method of assessing communication (Kenny, Veldhuijzen et al. 2010). A 1989 publication reviewed three methods of assessing patient counselling: self-completed diaries; survey data; and direct observation. The review found that the three methods produced similar results for the assessment of activities relating to patient counselling. However none of the methods assessed communication skills, they only assessed descriptive factors of counselling, for example, frequency of patient counselling, topics discussed, participant demographics etc. and do not support the use of indirect methods for assessment of communication (Ortiz, Walker et al. 1989).

This section will first present literature using indirect methods of assessing pharmacist-patient communication and then those studies using direct methods of assessment.

2.2.1 Indirect Assessment

The indirect assessment of communication skills is common in pharmacy practice research and can also be considered as the use of proxy measures for assessing pharmacist-patient communication. A range of methods of indirect assessment were found in the literature, including participant reports via interviews and questionnaires, simulated patients and self-completed diaries, as well as a range of measures, for example, patient satisfaction.

A large number of studies aiming to analyse communication within pharmacist-patient interactions use indirect methods to assess the interactions. Indirect methods were often used to determine the frequency of particular activities within communication, such as the frequency that information regarding side effects is given during consultations. Methods employed include surveying patients via interview post-consultation (Alkhawajah and Eferakeya 1992; Edmunds, Francis et al. 1997; Azzopardi, Serracino-Inglott et al. 2003). This method relies on patient recall of specific information such as dose, side effects or storage and does not directly ask patients for their opinions of the pharmacist's communication. It is not clear whether patient recall of information is a good indicator of the skills that the pharmacist employed in transferring the information (De Young 1996a). Surveying patients after communication about information recall is at risk from poor patient recall, subjectivity, and issues of appropriateness of the outcomes assessed (De Young 1996a). De Young concluded that research should be based around communication models to better inform the research, and should not rely on outcomes such as patient knowledge and compliance to indicate communication standards.

A quantitative approach has been used to create a quality assurance evaluation tool to be used to score community pharmacists on the quality of the services they offer, including communication. The study has attempted to access the views of pharmacists, service recipients and non-pharmacy healthcare professionals, to provide more comprehensive feedback (Azzopardi, Serracino-Inglott et al. 2003). The study found that patients were generally happy with the service provided whilst healthcare professionals felt there was room for improvement and a range of tools for future assessment of pharmacy services have been created but the tools assess participant opinions and not communication directly. A study found variation between self, simulated patient and physician ratings of pharmacist communication during formative OSCEs (Observed Structured Clinical Examinations) and the authors propose that this may be due to differing expectations of communication ability (Lau, Dolovich et al. 2007). Other studies have also shown that perceptions of communication within a previous consultation are not always accurate and can vary between participant groups (Cegala, Gade et al. 2004; Kenny, Veldhuijzen et al. 2010). This suggests that using participant reports of communication may not be a reliable method for assessing communication skills.

Other similar methods have included asking pharmacists to code interactions with patients according to a system of Problem, Analysis and Solution (PAS) codes. Again it was found that coding varied substantially between pharmacists and so the tool was not useful in assessing communication across pharmacies, but that individual pharmacists may be able to use the coding system to help structure their own consultations. The authors suggest that the research does raise the question of whether consultations can be quantitatively coded at all due to their unique and individual nature (Ijben, Van Mil et al. 1999).

A recent review found that the use of simulated patients within pharmacy practice was primarily aimed at assessment of the pharmacist's communication skills and not at development of those skills, but did not discuss in detail the methods of assessment. The studies reviewed explored communication skills in community pharmacy or in universities in a teaching environment. Interestingly the review reported that none of the studies defined communication skills and few reported details of the skills to be assessed. Only two of the fifteen studies reviewed linked the use of simulated patients with feedback for pharmacists and the authors suggest that opportunities for learning are being missed through a lack of feedback to pharmacists (Mesquita, Lyra Jr. et al. 2010).
Studies that used a simulated patient methodology and were conducted in universities could have made use of videotaped consultations for later analysis but this was not reported. Therefore assessment relies on assessor recall after the conclusion of the exercise. An additional complication of using simulated patients in teaching or assessment is that the situation is not real-life, despite attempts to make the consultation as realistic as possible. Therefore it is not certain that the results would be replicated in real patient consultations. Utilising a simulated patient or 'secret shopper' method in community pharmacy situations requires the documentation of the consultation after leaving the shop as pharmacists are not aware of which patient is part of the assessment; again assessment relies on recall from the simulated patient. This method was used by a Finnish study which found that there were some improvements in the frequency of communication following a

national intervention, specifically regarding patients' requests for information. However, counselling in response to requests for medication by name, or repeat prescriptions was low. A score system was used to assess the communication, marking pharmacists for which pieces of information were given or requested during a consultation (Puumalainen, Peura et al. 2005). A recent UK study made use of students as 'mystery shoppers' to assess the clinical and consultation skills of community pharmacists during two patient scenarios for emergency hormonal contraception (EHC) requests. The study found that overall the quality of interactions was good and that pharmacists who had received training to provide EHC by patient group directions (PGD) performed better in one scenario. No difference was found between chain and independent pharmacies (Weiss, Booth et al. 2010). In contrast to studies mentioned above, this study provided written feedback to pharmacists at the end of the study, including general and individual findings from the study. Repeat visits to the pharmacists would be required in order to assess the effectiveness of feedback. Whilst again relying on recall after the consultation, this study aimed to assess both clinical and consultation skills. Two researchers were present during each encounter which helped with recall and reliability of ratings. The authors suggest that further development of the ratings scales used in assessments may improve data collection for future studies but that the method was used successfully.

Also within teaching of communication skills, a tool has been designed for use by patients to assess the communication skills of pharmacy students (Mackellar, Ashcroft et al. 2007). A survey of those teaching communication skills to pharmacy students at three universities asked participants to rate the validity and reliability of a total of 24 assessment criteria for patients to use. The study identified only seven criteria which could be used by patients to assess communication according to a likert scale. Data has not been published about the success of this tool in practice. Again this is a quantitative method that is planned to be used with pharmacists as well as pharmacy students. Obtaining direct patient feedback is essential if pharmacists are to provide a service that meets the needs of its patients and this quantitative tool provides a method for doing this, but again, does not allow direct evaluation of communication.

In order to more accurately assess pharmacist-patient communication, direct assessment of the interaction is essential and this will be described in the next section.

2.2.2 Direct Assessment

Direct assessment of communication by trained researchers involves capturing the communication in some way, for example audio or video recording or direct observation. The communication can then be assessed according to a large range of methods, both quantitative and qualitative. Pharmacy practice research has tended to favour quantitative research due to the strong influences of the scientific disciplines underpinning pharmacy and the inexperience of pharmacy practice researchers with qualitative methods, but both types of studies are present in the literature.

Quantitative assessment based on direct observation is a long-standing methodology in the assessment of communication skills. In 1975 Dickson and Rodowskas used a work sampling methodology with the aim of establishing what proportion of pharmacists' time was spent in communication. A trained observer spent 36 hours recording data in each of 20 pharmacies and recorded observations every three minutes. This provided the researchers with detailed information about the daily activity of the pharmacist studied. They report that interacting with patients was the most frequent communication activity and that time and staffing issues affected the proportion of patient communication based activities undertaken (Dickson and Rodowskas 1975).

An early study which aimed to assess the quality of community pharmacist-patient interactions found that communication skills were satisfactory in 58% of consultations, after the research team rated audio-recordings (Smith, Salkind et al. 1990). However, it is difficult to interpret the findings as the only details given of the skills assessed are 'listening and responding skills'. The pharmacists were rated on scales from poor to excellent with corresponding numerical values of 1 – 6. Nine characteristics were assessed in total, including information giving, instructions and explanation which were assessed separately from communication skills. Although the study analyses direct recordings of the interactions and attempts to directly assess communication, the lack of detail given to support the 9 criteria assessed makes it difficult to interpret the findings from this study.

In 2000, Hargie et al attempted to establish what pharmacists themselves felt were the key components of the communication process (Hargie, Morrow et al. 2000). Pharmacists were asked to review videotaped consultations and define what they felt to be the important aspects of communication within a consultation. This resulted in a list of key communication skills that has been used in designing training programmes for undergraduate and postgraduate pharmacists. The list is divided into 11 sections, with between 1 and 13 skills listed in each section. The skills are listed in order of pharmacists' perceived importance, with building rapport topping the list. Within the building rapport category, preserving patient confidentiality was the key skill reported. The list provides a useful reference of the communication skills that pharmacists believe are the most important within a consultation and uses direct assessment of communication; but the pharmacists are not experts in communication. In addition, the results of this study do not demonstrate the effect of utilising these skills and so this list would need to be combined with evidence supporting the inclusion of each skill in future training courses.

The problem of subjectivity seen with indirect assessment is also found in a study assessing the communication skills of medical students. Teachers and simulated patients gave significantly different marks according to the same marking criteria when reviewing video-taped student consultations over a 2 year period (Cooper and Mira 1998). Despite both the teachers and simulated patients reviewing the same video-taped consultations, this study emphasises just one factor that can influence results when using study participants' assessment of communication skills for direct as well as indirect assessment.

Other studies also make use of the review of video-taped consultations to conduct similar research. One such study used analysis of video recordings to assess the frequency of use of empathic communication skills before and after a training intervention. The study showed limited uptake of the taught skills but was able to conduct a detailed comparison through the use of direct consultation data analysed by a trained researcher (Lilja, Larsson et al. 2000b).

One way to overcome the difficulties of participant assessment of communication skills is demonstrated by a Canadian study which recruited pharmacists and simulated patients to role-play pharmacist-patient interactions in a mock pharmacy within a University setting. The interactions were video-recorded and analysed by the researchers which provided the researchers with detailed and accurate data (Deschamps, Dyck et al. 2003; Dyck, Deschamps et al. 2005). However, whilst efforts were made to recreate a pharmacy situation, the interactions may not truly reflect real life encounters for a number of reasons. These include: the pharmacists who agreed to participate may be more able communicators, the pharmacist may be on their 'best behaviour' and trying to show use of good communication skills throughout the consultation and the patient reactions may not match those of a real patient. Therefore, whilst this study makes use of video data, the method is limited by the unrealistic context.

Studies using a qualitative approach to assess actual consultations were less common in the literature. Conversation analysis has been used to analyse the way in which pharmacists interact with patients who have long term illnesses and their carers. In a study of a paediatric oncology clinic, it was found that the asymmetry usually seen in practitioner-patient consultations was much less evident due to the increased knowledge of the patient and their parents (Pilnick 1998). It has also been shown that much of the activity of pharmacists when counselling patients or carers in this setting is actually based in information giving rather than advising (Pilnick 1999). The different approaches used by pharmacists when initiating interactions elicit varying receptions and show the delicacy of actively engaging patients in a counselling process (Pilnick 2003). The utilisation of conversation analysis allows direct, in depth assessment of the communication, without the use of predefined guidelines or checklists.

Further detailed research into the content of counselling by pharmacists highlights some of the problems faced. Discourse analysis and follow up in-depth interviews found that in patients aged over 80 years of age, there was considerable resistance to information and advice offered or given by pharmacists (Salter, Holland et al. 2007). Patients often referred to the importance of their relationship with their GP and expressed a wish not to accept advice or changes recommended by the pharmacist without first checking with the GP. Not only did patients' resistance to pharmacist interventions show in this study, but also that in some cases the pharmacist actually had a negative impact on the patients' confidence, integrity and self governance (Salter, Holland et al. 2007). It is essential that pharmacists are properly trained in communication skills to ensure that patients receive benefit from consultations, however further research should be conducted to see if these findings are comparable with other patient groups. The combination of direct assessment of recorded consultations with participant interviews allowed detailed exploration of the communication and contextualisation of the findings.

A range of methods has been used to capture direct consultation data for analysis including observation and video recording. Direct assessment allows more detailed analysis of the communication skills used but methods of analysis of recorded data need to be carefully considered in order to gain the most from the data collected. Utilising a communication assessment tool is one way of achieving this and some of the available tools are reviewed in the next section.

2.2.3 Tools for Assessing Communication Skills

As described above, much of the current research specifically aimed at assessing the communication skills of pharmacists has done so using a quantitative methodology. This has resulted in a number of tools available for assessing the frequency of predefined aspects of communication, for example information giving or providing an opportunity for patients to ask questions.

Few tools for assessing pharmacist communication have been published in the literature and so selected tools from the medical literature will be explored here first. A review of published communication assessment instruments for medical consultations from 1986-1996 found that a large range of instruments had been published, but few had published validity data (Boon and

Stewart 1998). The tools were shown to assess communication in a large range of ways including: real–time assessment by observers; standardized patients; application to audio or video-taped consultations and self reporting. These methods have been discussed in the sections above. The methods of analysis reported included rating scales, checklists for specific behaviours, interactional analysis and templates for descriptive feedback for students. The tools were found to have a range of advantages and disadvantages but the study concluded that researchers should work together to produce fewer, high quality, validated tools to assess the different aspects of communications skills required (Boon and Stewart 1998). New tools are still being developed to suit individual needs, for example, to assess the communication skills of medical students in Amsterdam (de Haes, Oort et al. 2001) despite the findings of Boon and Stewart in 1998.

Farrell et al report the use of a tool to measure clinician's assessment of patient understanding (Farrell, Kuruvilla et al. 2009). Transcripts were analysed for examples of four different types of assessment of understanding, ranging from request for 'teach-back' to statements such as 'ok?' that could be interpreted in a range of ways. The extracts were categorised as definite or partial; partial examples were not followed by a pause in which the patient could respond or were leading questions such as 'you don't have any questions do you?' The study shows that 21% of consultations contained no definite assessment of patient understanding, and 15% contained no definite or partial assessments of understanding. Only 2% of consultations contained the most effective type of assessment, the request for teach-back, and 2% contained examples of open ended assessments. The data show that there is a need for improvement in this area but found the tool was effective at assessing this communication skill.

The Decision Support Analysis Tool (DSAT) has been developed to assess both physician general communication skills and the use of decision support tools. In an intervention study, patients provided with a decision support questionnaire to take home and complete prior to a follow up consultation for a decision over hormonal treatment were compared to patients receiving a brief information pamphlet. It was found that patients using the decision support questionnaire showed an increased participation in the interaction with more 'back and forth' discussion and the tool prompted physicians to discuss the patient's decision making status. The DSAT was reported to show good reliability and validity for use in assessing recorded patient-physician interactions. The DSAT is split into two sections, the first contains the skills required for supporting decision making: discuss decision making status, discuss knowledge/information, discuss values, discuss support, discuss commitment to act and discuss learning for future decisions. The sections each contain a number of individual skills or processes. The second section contains general communication skills which are divided into four sections: managing the encounter; listening; questioning and sending messages. Transcripts were coded by assigning each physician response (consisting of a single word or several sentences) one decision support code and one communication skills code. There is no explanation of coding responses which do not match any particular code or those that match multiple codes. The DSAT tool may be useful for assessing the skills used in supporting decision making, however, these skills are not necessarily distinct from general communication skills and viewing them as separate within the same analysis could lead to confusion, for example good listening skills are required during decision support. Separation of the DSAT into two sections does however enable application of just the decision support skills, if required (Guimond, Bunn et al. 2003).

Henbest and Stewart developed a simple tool for the assessment of the patient-centredness of a physician-patient consultation. The tool is presented as a rapid, accurate and simple tool that can be used for self-assessment, teaching, or evaluation of large numbers of consultations. The authors suggest that full transcription of audio tapes is not required, making this a useful tool in research and teaching. The tool works by rating the physicians response to any patient offering on a scale of 0 – 3 and calculating a mean score of all responses to give a consultation score. A patient offering was classified as any verbal expression from patients which signals or hints at their expectations, thoughts or feelings. The physicians' responses to the offering were rated as (0) ignored, (1) closed response preventing further exploration, (2) open-ended response allowing further exploration and (3) specific facilitation of response (Henbest and Stewart 1989). This is a useful tool for assessing a general level of the patient-centredness of a consultation. However, the Henbest and Stewart rating scale has not defined how many opportunities for patient-centredness should occur in any consultation, it is therefore possible for a consultation to be rated as highly patient-centred if the patient raises only one concern, and therefore has little involvement in the consultation. (Greenwood, Howe et al. 2006). The tool measures only how patient concerns are dealt with by the practitioner and not how these offerings originated, for example physician or patient initiated. In addition, later studies have reported only moderate inter-rater reliability and validity of this tool (Mead and Bower 2000).

It was reported in 2001 that the most commonly used structure for communication skills teaching and assessment in US and Canadian medical schools is the SEGUE Framework (Makoul 2001). This acronym corresponds to the stages included in the framework: Set the stage, Elicit information, Give information, Understand the patient's perspective, and End the consultation. The framework lists 32 individual skills that can be assessed by a yes/no checklist for their presence in a consultation. The framework has been validated for use in teaching, assessment and research and for use by a range of assessors. Good validity and reliability data have been published and the framework is widely used as a result.

The Calgary-Cambridge Referenced Observation Guides were developed by experts in health care communication based in Canada and the UK and aimed to produce a fully referenced list of the communication skills that should be employed in medical consultations (Kurtz and Silverman 1996). The guides were designed to support the teaching and learning of communication skills, and planning of curricula, based on the growing body of medical communication literature. The guides present a total of 71 detailed skills that are commonly divided into two guides, depending on the subject of teaching. The guides can be used in both formative assessment for the provision of detailed feedback, and summative assessment by the addition of satisfactory/unsatisfactory columns to create a checklist. The tool was designed primarily for use in teaching and not research and the large number of skills may make it unwieldy in application to larger data sets.

A large number of tools for use in medical consultations have been developed with a range of benefits and drawbacks and a selection has been reviewed here. Not all tools have been included since this literature review is focussed on pharmacist-patient communication. Tools applied to pharmacist-patient communication will now be presented.

One study conducted in the UK has applied two established medical communication assessment tools to pharmacist-led consultations. The study applied the Henbest and Stewart rating scale for patient-centredness of consultations and the SEGUE framework for assessing consultation content. The study found that both tools could be applied to pharmacist-led consultations although some small alterations were needed to the SEGUE framework as pharmacists were not trained to engage in discussion of diagnostic procedures and because the consultations were conducted at patient homes, no discussion on waiting times was required (Greenwood, Howe et al. 2006). The pharmacists scored well in both assessments which suggests that the pharmacists communicated well during consultations. The ease of application of these two medical communication assessment tools indicates that pharmacy-specific tools may not be required.

A tool designed to assess and provide feedback on the communication of pharmacy students was designed for use by mentors during student placements in community pharmacies in Finland (Hyvarinen, Tanskanen et al. 2008). The tool lists five key areas on which to provide feedback and offers examples and further points for feedback within each section. The guide is brief and simple to understand in comparison to other tools described here however the students reported that mentors found the guide complicated and lengthy, with too many aspects to concentrate on at one time. It should be noted that mentors were not trained in assessing communication skills, or in use of the guide and this tool investigates participant perceptions which have already been discussed as problematic. The authors conclude that increased perceived quality of feedback was associated with use of the guidelines, however, the data show that the guidelines were used in 94 cases to provide feedback and the quality was perceived to be good in 40 cases, whilst in 54 cases the feedback was either not good, or not mentioned in the report. Only 50% of students reported that the guidelines were useful in the provision of feedback. This suggests mixed efficacy of the use of the guidelines, perhaps due to the problems associated with implementation discussed above.

A medication-related consultation framework has been developed for evaluating pharmaceutical consultations and the author reports good face and content validity but the framework has yet to be published in full and so review at this stage is not possible (Tawab, Davies et al. 2005). The framework offers an interesting possibility for a pharmacy-specific consultation evaluation tool.

Many studies have used indirect methods to assess communication skills which has resulted in proxy measures for communication and a lack of explicit data. More direct methods of assessment are now being employed and provide rich data about pharmacist-patient communication but there is a paucity of research utilising taped encounters and interactional analysis of consultations. An increase in methods exploring the interpersonal dyad that exists in pharmacist-patient consultations is now required (Shah and Chewning 2006). It has been suggested that multiple perspectives of communication should be sought including patient, physician and observers and in addition, the use of multiple methods where possible will provide a more complete picture of the interaction (Street 1997).

The tools described here present a range of analytic methods to directly explore consultation data. All require audio or video recordings of consultations which allows direct analysis but the application of a tool often necessitates quantitative analysis. Accurate data regarding the use of general communication skills or a small range of particular skills, can be assessed by selecting the appropriate tool but concerns have been voiced over raising the profile of those skills that are easy to measure over other equally important skills that may be hard to pinpoint in analysis (Weiss and Peters 2008). Many of the tools can be used in teaching as well as research but the wealth of tools can make selection of the best tool difficult. Emergence of tools such as the SEGUE framework, will help to link research and teaching to facilitate uptake of key findings into practice but smaller more specific tools do not share this recognition.

The use of tools in the analysis of pharmacist-patient communication often does not provide an opportunity to assess how the patient reacts to the pharmacist’s communication or to allow themes to emerge from the data. There are a limited number of studies that qualitatively assess the communication process. These studies make use of methodologies such as conversation and discourse analysis to provide an insight into the communication skills used by pharmacists and to indicate possible areas for future training. They can also highlight the difficult and delicate pathway that pharmacists have to tread when engaging in consultations with patients.

The next section will present literature exploring pharmacists' learning of communication skills.

2.3 Learning Communication Skills

Pharmacists' views about counselling patients have been investigated over a long period of time. In 1982, Kirking found that pharmacists felt they were qualified to provide patient counselling on medication and that provision of patient counselling would result in improved patient health outcomes, for example through improved medicine taking and effectiveness of therapy. The pharmacists at this time also felt that they did not require any additional training and felt that other members of pharmacy staff would not be able to provide counselling on medications as they had not received sufficient training (Kirking 1982).

Methods of teaching communication skills to health care professionals have been widely researched and in particular, the literature surrounding physician-patient communication is extensive. Whilst some pharmacy specific research has been conducted, much has been learnt from the wealth of medical literature. Many models have been proposed for teaching communication skills, including some of the tools mentioned above but overall it has been reported that providing doctors with underpinning theory and opportunities to practise and try out new skills, is effective in teaching new communication skills. However, in order to implement those new skills, the addition of observed clinical practice with personalised feedback is required (Maguire and Pitceathly 2002). A study examining long term use of communication skills taught during an intervention found significant improvements in both physician reports of confidence and competence, and additionally reported improved use of communication skills assessed through analysis of videotaped consultations before, and three months, after the intervention (Fallowfield, Jenkins et al. 2002). Research assessing more long term uptake of new skills would be helpful in determining whether effectiveness of skills training fades over time and determining the most effective methods of teaching communication skills.

There is currently little literature in this area relating directly to pharmacists. Some work has been done to assess the needs of pharmacists and to develop profession-specific training (Morrow and Hargie 1986). Also in 1986, Berger stated that teaching communication skills alone is not enough but that student beliefs about communication must also be changed and that the students must learn to 'internalize' the newly acquired skills to be able to practice them effectively (Berger, McCroskey et al. 1986). Berger et al. offer a tool to help teachers assess the cognitive change in learners as a result of communication skills teaching. As pharmacists are taking on new roles, such as prescribing, it is important that research relating to communication skills teaching for pharmacists is forthcoming in order to enable today's pharmacists to communicate effectively and confidently (Cleland, Bailey et al. 2007). The need for increased training has also been acknowledged by the UK governing body for pharmacy, The Royal Pharmaceutical Society of Great Britain (RPSGB), in the course material for trainee prescribers (The Royal Pharmaceutical Society of Great Britain 2007). Research relating specifically to the teaching of communication skills to pharmacists will be reviewed here.

It has been said that pharmacists leave university well equipped with the knowledge to educate their patients, but not necessarily with the skills (Fisher 1992). This has recently been found in countries such as Brazil where communication courses are only just being introduced into the undergraduate curriculum (Lyra Jr, Rocha et al. 2007). In more developed countries, communication skills have been taught at the undergraduate level for some time but has been reported to remain limited in some cases (Pronk, Blom et al. 2002). Some of the earlier pharmacy specific research has found that microtraining is an effective way of teaching communication skills to pharmacists. Microtraining involves breaking down the overall process into small distinct fragments and teaching these fragments individually followed by feedback. The students are then helped to combine the fragments to achieve effective communication (Hargie and Morrow 1989).

A more recent development in the communication training of pharmacists has been based around teaching pharmacy students to view communication as interacting with the patient as an individual. Specifically this has meant teaching students the psychological aspects of patient counselling via transactional analysis, and personality assessment. Teaching in this way aims to help students to adapt their counselling to the patient throughout a consultation. It was reported that pharmacy students respond well to this style of teaching but the study only reported student experiences and no structured assessment of communication skills prior or post teaching session was undertaken (Lawrance 2007). Additional reports of updating communication skills teaching at undergraduate level explored the effects of interviewing patients in a university setting. The study reports that students found the exercise useful to help relate theory to practise in a 'real-world' experience. The exercise also helped to foster reflective practice and peer review in the development of skills (Shah 2004). Another study which explored how pharmacists tailor counselling to individual patient needs, found that assessing the non-verbal communication of the patient was essential in order to adapt the communication. The authors conclude that learning through a process of theory, practise and reflection, was said to be the most helpful way for pharmacists to improve this aspect of their communication skills (Katajavuori, Valtonen et al. 2002).

A structured method of teaching communication skills to pharmacists has been explored by a study which presents pharmacists' views of the communication skills training given on a supplementary prescribers course. This training was based around the Calgary-Cambridge model (Silverman, Kurtz et al. 1998) of structuring clinical consultations. The study showed that pharmacists found the training useful in helping them to acquire the new skills that they felt were necessary for carrying out extended roles, such as how to structure consultations and elicit patient perspectives and beliefs. However, the pharmacists still found it difficult to apply these skills in practice (Cleland, Bailey et al. 2007). Research suggests that communication skills courses with opportunities for practising skills are essential for pharmacists to learn how to implement new skills in practice. This follows training in the theory of the use of empathy as a communication skill (Lilja, Larsson et al. 2000b). The study showed that an educational intervention altered the degree of empathic understanding among the study group, but this did not result in an increased use of empathy in practice. Conversely, research into the communication skills training of medicines counter assistants suggests that some of the difficulty in achieving behaviour change through communication skills training (i.e. putting the new skills into practice) may be due to the training not being thoroughly based in theory (Cleland, Francis et al. 2007). By carefully designing training based in the theory of behavioural change as well as communication theory (utilising the Calgary-Cambridge guidelines), participants may find it easier to implement the new skills, particularly increasing the effectiveness of information gathering (Watson, Cleland et al. 2007).

Research has acknowledged the place of learning communication skills through everyday living but Berger et al. recognise that misconceptions relating to communication can arise from learning skills in this way. For example, it is commonly understood that meanings are in words, but in fact meanings are assigned to words by individuals in specific contexts. In order for a pharmacist to successfully communicate, they must anticipate the meaning that patients may associate with particular words, and tailor their interaction accordingly (Berger, McCroskey et al. 1986). More recent studies have more highly valued the place of informal learning of communication skills and found that experienced community pharmacists who are highly empathic, learn their skills of empathy over time through observing others and self-reflective practices (Lonie 2006).

As pharmacy practice continues to evolve and higher demands on placed on the communication skills of pharmacists, training must keep up to ensure competent pharmacists are available to their patients. A range of methods of teaching communication skills have been explored, each with a different focus and it may now be necessary to evaluate which methods will best provide pharmacists with the skills they need and the ability to use them in order to achieve the best possible patient outcomes.

Having learnt communication skills and integrated them into practice, pharmacists must be aware of the ways in which communication skills can influence pharmacist-patient interactions. This chapter will now move on to explore the roles of communication skills in pharmacy practice.

2.4 Role of Communication Skills in Pharmacy

The literature relating to pharmacist-patient communication has explored a great variety of aspects of this interaction and a number of roles for communication skills have been reported. This section will explore the place of communication skills in a number of roles within the pharmacy-patient interaction. The importance of communication skills in new and expanding roles of pharmacists will be explored first, before moving on to the influence of skills on providing information to patients. This section will move on to explore the role of communication skills in building relationships, and finally encouraging patient participation in consultations through influencing patient communication and eliciting patient beliefs.

2.4.1 Increasing Pharmacist Roles

Pharmacy practice research often attempts to show the effectiveness of expanding roles adopted by pharmacists, especially in community pharmacy, and a large range of studies can be found in this area: (Opdycke, Ascione et al. 1992; Cairns and Eveleigh 2000; Morrison and Wertheimer 2001; Zermansky, Petty et al. 2001; Azzopardi, Serracino-Inglott et al. 2003). As pharmacy practice research continues to expand, so too does the role of the pharmacist, for example primary care pharmacists are seeing their role expand to include medication counselling (Chen and Britten 2000) Medicines Use Reviews (MURs) and dispensing of Information Prescriptions (Gray, Celino et al. 2009) and UK pharmacists from all settings are able to train as prescribers. A 1998 study reported that pharmacists believe they are the health professionals of choice to counsel hospital inpatients regarding medicine use (Griffith, Schommer et al. 1998). Increasing involvement in these services requires a range of different communication skills that pharmacists may not be practised at using and has fuelled many of the recent studies which assess the impact of communication skills on the ability of pharmacists to positively affect patient outcomes. However, the importance of communication skills in consultation roles is not new to research and was described by Fisher in 1992. He suggested following a six-step communication process focussing around the use of open questions to ensure that patients understand and accept the information provided to them, with the aim of improving compliance with treatment (Fisher 1992). It has been reported that pharmacists do not always have confidence in taking on new roles such as prescribing (Weiss and Sutton 2009) and the literature shows mixed support from patients in the new roles that pharmacists are now able to provide (Iversen, Mollison et al. 2001; Tinelli, Ryan et al. 2009). Studies into the attitudes of patients towards counselling have found that patients do not generally view pharmacists as a source of information about their medicines. Some of the reasons for this were that patients were not used to receiving such counselling from their pharmacist and they did not perceive it to be part of the pharmacists' role (Lisper, Isacson et al. 1997; Skomo, Desselle et al. 2008). More recent data still suggests that whilst patients had no concerns about pharmacists undertaking supplementary prescribing, they had little idea of what to expect from the service (Stewart, George et al. 2009). Whilst this situation may have changed in some places since publication of the study Lisper's research (1997) Skomo's more recent findings suggest that pharmacists must still work to make the provision of counselling a common feature of pharmacy visits. Hopefully this will improve patient opinion and uptake of pharmacist counselling and utilising good communication skills will help to achieve this.

An assessment of community pharmacists' involvement in home visits to patients with heart failure found that pharmacists had good consultation styles but not necessarily effective advanced interviewing skills, such as those of motivating behavioural change or promoting shared decision making. Patients were happy with the service they received but the visits did not result in decreased hospital admissions or mortality (Holland, Brooksby et al. 2007). A study in 2000 found that as pharmacists took on increasing roles, such as asthma counselling, additional training in consultation skills such as closing a consultation may be useful (Cairns and Eveleigh 2000). These studies suggest that targeted training to improve specific communication skills may be required for pharmacists to be effective in roles such as this.

Research has shown that pharmacy students who conducted a diabetes check with community pharmacy patients as part of their training, had an increased counselling role orientation when compared to students undertaking drug-profile reviews for diabetic patients (Guirguis, Chewning et al. 2009). This means that students were more inclined to participate in patient counselling activities after the intervention and suggests that training at the undergraduate level can help prepare future pharmacists for the increasingly counselling based roles ahead.

As pharmacists take on more advanced roles, it is essential that pharmacies make the best use of the skills of pharmacy staff. In order to fully engage with the new roles available to them, pharmacists will have to relinquish the responsibility for some of their traditional roles which requires additional communication from other staff including medicines counter assistants. Some research has looked at the use of communication skills by other pharmacy staff members.

Research has found that medicines counter assistants (MCAs) have to manage different types of dialogue, for example, retail or medical based interactions with patients and that extra training would be helpful for assistants to learn how to engage with and move between differing dialogues. The authors suggest that training should perhaps begin in making the interactions more patient-focussed, thus enabling them to operate without the confines of structured protocols and mnemonics (Banks, Shaw et al. 2007). Research has also shown that medicines counter assistants are unaware of the importance of giving a combination of information and advice to ensure that the customer has understood the message. Communication between MCAs and customers was often based around information gathering and future training would need to emphasise the importance of both information and advice giving (Garner and Watson 2007).

In Dutch community pharmacies much of the patient education activities that centre around verbal communication with the patient are performed by pharmacy technicians rather than by pharmacists (Pronk, Blom et al. 2002). The level of such activity was however found to be extremely low, with barriers such as time and staffing levels reported to be experienced by pharmacy staff. Dutch pharmacists receive limited training in communications skills during their undergraduate education and it is hoped that organisational changes would enable pharmacists to become more involved in the patient counselling process (Pronk, Blom et al. 2002).

The additional services provided by pharmacists challenge some of the communication skills that pharmacists use in traditional roles. Additional training has been recommended to help pharmacists successfully conduct more counselling based roles. In addition, it is important that the other staff members, particularly in community pharmacy, have sufficient training in order to free up pharmacists time to provide more advanced roles.

Whilst new communication skills may be needed for some advanced roles, highly developed communication skills are also required for one of the essential roles of pharmacists: information giving. This will be explored in the next section.

2.4.2 Giving Information

Providing information about medicines to patients is one of the fundamental roles of pharmacists. As such, considerable research has been devoted to this service. It has been reported in the medical literature that prioritising information giving and patient learning within consultations is essential and that training must incorporate the skills to facilitate patient learning and also to consult with well informed patients (Jones, Hampshire et al. 2001). Exploration of patient satisfaction with pharmacy services in Nigeria has shown that the availability of the pharmacist and the provision of a thorough explanation of medicines, in combination with listening to the patient, are strongly related to patient satisfaction (Oparah and Kikanme 2006). Research has also shown that patients support the information giving role and value the pharmacists' help in understanding their medicines (Blenkinsopp, Bond et al. 2007). However, a small study of ten type 1 diabetics in Denmark found that the patients were unaware of and did not access the information provision services of their community pharmacy. Only three of the patients interviewed could envisage a role of the pharmacist in future treatment of patients with type 1 diabetes (Haugbolle, Devantier et al. 2002). The variation in perception reported in this study may be due to cultural differences or the small sample size but does indicate that pharmacists may still need to inform patients about the services they can provide.

A study from 1997 explored patient recall of information after prescription of treatment by the doctor in an eye casualty setting. During the study, patients collected their prescription from the hospital pharmacist who had been instructed to reiterate the treatment details to the patient. This resulted in a significant improvement in patients' accurate recall of treatment information, such as dose and length of treatment. The authors suggest that this intervention improved the communication between doctors and patients; however, the study only assessed patient recall of information and not the communication between doctors and their patients. In addition, the pharmacist-patient interaction took place after the doctor-patient consultation and so could not have influenced the communication. What the results do support is the positive role that pharmacists can play in helping patients to remember their treatment instructions by reinforcing information provided during consultations with the doctor (Edmunds, Francis et al. 1997).

Despite the earlier mentioned reports that pharmacists feel they are well placed to counsel patients, a Finnish study found that pharmacists were surprised how readily patients accepted an offer of counselling (Katajavuori, Valtonen et al. 2002). The research showed that if patients who are selecting self-care products are offered help, they are usually ready with questions to ask. Patients often felt their illness was not important enough to ask for help so were pleased when help was offered. The study aimed to help pharmacists learn how to tailor counselling to individual patient needs and found that assessing the non-verbal communication of the patient was essential in order to adapt the communication. The study suggests that many patients are happy to receive information from pharmacists if it is offered and supports an increase in pro-active patient counselling in community pharmacies. This is supported by earlier research which reports that information seeking by the patient was key in eliciting some types of detailed information from the pharmacist. The authors suggest that pharmacists must make sure patients are aware that they can ask questions by general advertisement of the service, and explicitly asking patients if they have any questions (Schommer and Wiederholt 1997). It has been reported that pharmacists make assumptions about the level of information or advice that patients want in order to meet the patients' requirements and are not using the skills mentioned above to help tailor information appropriately. The researchers suggest that pharmacists may need more training to help make these assumptions more accurate. Increased patient participation, in terms of voicing questions, would facilitate the pharmacists in this task (Lilja, Larsson et al. 2000a). Research conducted in Finland shows that although pharmacists provide information and counselling to most patients, that information in not always tailored to the patient but is more often influenced by the pharmacist's own motivations and attitudes. (Kansanaho, Isonen-Sjolund et al. 2002). More recent research shows that pharmacy students misinterpret silence as an indication that the patient does not want to receive more detailed information or counselling (Lilja, Volmer et al. 2008). It is essential that an accurate assessment of patient requirements is achieved in order to provide patients with a service that meets their needs.

A Canadian study investigating pharmacist communication reports that the information regarding side effects provided to patients by their pharmacist may be oversimplified. The study suggests that pharmacists should give numerical values to support incidences of side effects rather than verbal terms such as 'commonly' or 'rarely' so that patients are able to make an informed risk assessment. The authors acknowledge the difficulty of having such values to hand for every side effect of every drug dispensed on a day to day basis (Dyck, Deschamps et al. 2005). However, this study does not consider the need to establish the level of detail that patients require in explanations from their pharmacist to make sure that pharmacists are correctly pitching the information that they provide and tailoring their consultations as described above.

Qualitative research has explored the information or advice giving nature of pharmacist consultations. Conversation analysis has been used to demonstrate that pharmacists most commonly give non-personalised, factual information during consultations. Providing advice that individualises information by considering consequences for the patient was rarely seen in the interactions studied. Providing advice may be difficult to achieve in consultations as only one approach resulted in the giving of advice rather than information (Pilnick 1999; Pilnick 2003). Discourse analysis has also shown interactional difficulties in giving advice during medication reviews and suggests that not all patients are receptive to advice from pharmacists and often call on the higher authority of the hospital or doctor to support their own knowledge (Salter, Holland et al. 2007).

As pharmacy practice research has progressed, studies have begun to explore specific aspects of the communication that occurs during the provision of information to patients. One key area is the checking of patient understanding. A North American study utilising self-reported data found that pharmacists checked patient understanding less often than other healthcare professionals conducting the same service (Doucette and Andersen 2005). The study suggests that the pharmacists involved may not be completing enough information transfer based activities during consultations, potentially due to shorter consultations than colleagues. These findings were supported by earlier research suggesting that pharmacists check patient understanding using active methods in just 20% of consultations (Deschamps, Dyck et al. 2003). In this study pharmacists checked for patient understanding in 80% of consultations but this was primarily achieved by saying ‘OK?’ and pausing slightly to allow the patient to comment. The authors acknowledge the multiple connotations of ‘OK?’ and the analysis was based on the researchers’ interpretation of the pharmacists intended meaning. Similar studies in medicine found that active checking of patient understanding by asking for the patient to repeat the information back, occurred in just 2% of consultations. Checking understanding by use of ‘OK?’ was common but 15% of consultations contained no check of patient understanding at all (Farrell, Kuruvilla et al. 2009). A 2008 study using video clips of medical consultations found that when physicians assessed patient understanding, patients preferred to repeat back their understanding to the physician rather than simply to be asked if they understand. In addition, the study patients preferred this to occur in a collaborative manner, for example the physician expressing that they wish to check their own information giving, or concerns over the amount of information provided, as this method reduces fear for the patient in admitting a limited understanding (Kemp, Floyd et al. 2008).

In contrast to the above studies, reports from a South African HIV clinic using conversation analysis of pharmacist-patient interactions show that pharmacists are using active methods to check the patients’ understanding multiple times throughout consultations. Methods most commonly used include asking the patient to show or tell the pharmacist what they understand. Post-consultation interviews with the patients showed a good level of patient understanding which suggests that the pharmacists are effective in ensuring their message is understood (Watermeyer and Penn 2009). The differences reported in this study may be due to the complexity of drug regimens in HIV therapy or the importance on both an individual and national level to effectively manage HIV but, whatever the cause, this study suggests that effective checking of patient understanding can result in high levels of effective information transfer. The importance of checking patient understanding has been documented by the studies reported here and others (Stevenson, Cox et al. 2004). In order to ensure patient understanding of the information provided a check must be a made and it is concerning that both medical and pharmacy practitioners are often not conducting this aspect of information provision.

The key themes from the research relating to provision of information to patients concern tailoring the information to suit the individual patient and checking that the patient has understood. These tasks add to complexity of the ‘information giving’ task but help to create more patient-centred interactions and focus on maximising patient benefit from the consultation.

The next section of this chapter will look at the use of communication skills in building relationships with patients.

2.4.3 Building Relationships

Pharmacists are in a unique position of availability in relation to other healthcare providers and, as such, build up relationships with their regular customers and their families. Building relationships with patients has been researched from a range of perspectives.

On a broad level, it has been suggested that such relationships facilitate health promotion within the local community (Anderson 2000). On a more individual level, research reports a link between good communication skills and the trust that patients place in the pharmacist (Bentley, Stroup et al. 2005;

Kielmann, Huby et al. 2009). Bentley et al. found that good communication skills positively influenced patients' evaluations of, or satisfaction with, pharmacist service. Limitations of this study are that the analysis consisted of university employees reviewing videotaped consultations meeting pre-defined criteria including 'good' and 'adequate' communication. Whilst this minimises many variables present in real consultations, it also removes emotional investment from the study participants, who may respond differently if they were actively involved in a consultation. In addition, there was a significant difference between the good and adequate communication styles of the pharmacist which may not be so pronounced in actual consultations. Further research has shown that building relationships and establishing trust between patients and health care providers, including pharmacists, enabled patients to feel more content with managing their care independently and improved not only satisfaction but the achievement of positive health outcomes (Lyra Jr, Rocha et al. 2007; Kielmann, Huby et al. 2009). The importance of empathy within these relationships has also been reported (Lilja, Larsson et al. 2000b) and engaging in social conversation has been linked both with increased patient participation in consultations (Sleath 1996) and perceptions of relationship quality (Worley-Louis, Schommer et al. 2003). The importance of empathy, trust and building relationships has also been reported in the medical literature (Burkitt Wright, Holcombe et al. 2004; Pederson 2009).

Researchers have sought to explore the types of relationship that build between pharmacists and patients. Austin et al. aimed to characterize the types of relationship by exploring the terminology used including, patient, client, customer and consumer, and the influence of each term on the interaction (Austin, Gregory et al. 2006). The research identified five relationship types based around these classifications and report that pharmacists must be able to differentiate between types of individual, and alter their response accordingly. For example the authors suggest that a 'patient' may be reliant on a pharmacist who should adopt a more paternalistic communicative strategy, whereas a 'consumer' may be opportunistic and require the pharmacist to be expedient in their service. It is unclear whether such distinctions will be useful to pharmacists in practice but as discussed above it is essential that pharmacists learn to quickly judge the level of relationship that each individual wants or needs, and tailors their communication accordingly. Further investigation into pharmacist and patient roles within the relationship has shown that the two participants do not always agree on the roles that each should adopt. The study assessed four roles for each participant consisting of 11 factors to assess pharmacist roles and 15 factors to assess patient roles and of these the two participants strongly agreed only on the information sharing role of the pharmacist consisting of three factors (Worley, Schommer et al. 2007). The authors suggest that better agreement on the roles of participants within the relationship may lead to improved functionality of the relationship. The importance of both patient and pharmacist personality have also been discussed in relation to tailoring the approach and style used in consultations with patients. The authors suggest using patient cues to tailor communicative style which supports the above research by suggesting that relationships differ between personality types (Houghton 2007).

A Canadian study showed that pharmacists paid little attention to the relationship and rapport building aspects of communication during videotaped consultations with standardised patients in a mock pharmacy (Deschamps, Dyck et al. 2003). The authors suggest that this may have been due to the artificial nature of the consultation and knowledge that there would no future contact with the patient, thereby negating the long term benefits of building relationships.

It has been reported that patients feel less satisfied with their relationships with pharmacists than those with their doctor. This is an important finding as the authors report that an increased perception of the quality of doctor-patient relationships positively correlated with medication related knowledge and self-efficacy for medicines management (Katajavuori, Valtonen et al. 2002). Therefore if pharmacists can forge better relationships with their patients, the potential to positively impact patient care could be enhanced but there may be other factors influencing this finding. For example, patients may perceive a better quality relationship with a professional who spends more time explaining treatment, which could result in increased patient knowledge but the relationship itself may not influence the level of information given.

Research has shown that building relationships between healthcare professional and patient can lead to both increased patient satisfaction and improved patient outcomes. The use of good communication skills can facilitate the building of relationships through responding well to patient cues and tailoring the style of communication to suit individual patients. Building trust and displaying empathy have been reported as important factors in helping to build relationships with patients. However research in this area is limited and it has been suggested that research based at an interactional level would help to examine the building of relationships, in particular the role of mutual trust, rapport and familiarity between participants (Shah and Chewning 2006).

The next section of this chapter will explore the use of communication skills in encouraging patient participation in consultations.

2.4.4 Encouraging Patient Participation

This section will explore a range of topics that help to increase patient participation in consultations, including adopting a patient-centred approach to consultations, eliciting patients' agendas, encouraging questions, and exploring patient beliefs. Concordance is a model which describes one approach to encourage patient participation in consultations but it will not be discussed in detail here. Concordance as an approach to consultations has a focus on prescribing and medicine taking, reaching shared decisions and redistribution of power within a consultation; these are not the focus of this review. In addition, whilst communication skills are an important factor in achieving concordance, there are many other factors involved. Not all aspects of pharmacist-patient consultations are concerned with treatment decisions or medicine taking and this review seeks to consider communication in relation to patient participation at all stages of the consultation and therefore will not focus on concordance. This section will begin by exploring patient-centred consultations.

The patient-centred approach to care has been the focus of much research and policy in recent years. A Cochrane review in 2001 explored the effects of interventions aimed at improving patient-centred care. Patient-centred care was defined by the authors as a philosophy of care that encourages: (a) shared control of the consultation, decisions about interventions or management of the health problems of the patient, and/or (b) a focus in the consultation on the patient as a whole person who has individual preferences situated within social contexts (in contrast to a focus in the consultation on a body part or disease) (Lewin, Skea et al. 2001). This definition will be employed throughout this thesis unless reporting on published literature using an alternative definition.

Patient centred care requires the application of a range of communication skills in order to facilitate patient participation in the consultation, and ultimately to improve patient outcomes. The Cochrane review found that interventions to help improve the patient-centredness of a consultation did result in significant increases in the patient-centredness of care and consequently improvements in patient satisfaction. However the review found limited evidence of effects on patient health outcomes and this finding has been supported by other literature (Lewin, Skea et al. 2001; Mead and Bower 2002) but some studies do suggest a positive link between patient-centred consultations and improved patient outcomes (Stewart, Belle Brown et al. 2000). Within pharmacy-specific research, the patient-centredness of a consultation has been linked to increased patient perceptions of relationship quality and, as discussed earlier, high quality relationships can be beneficial for patient care (Worley-Louis, Schommer et al. 2003; Worley 2006).

There is now a large and growing body of research to show that patient-centred interventions can lead to positive impacts on patient care, particularly those interventions focussing on health literacy and education (Fisher 1992; Coulter and Ellins 2007). It is important that pharmacists recognise the importance of accessing patients' views and involving them in the healthcare process (Azzopardi, Serracino-Inglott et al. 2003; Johnson 2006; Banks, Shaw et al. 2007). Pharmacists are well placed to help patients to adhere to their medicines and communication is key in achieving this through a patient-centred approach, with the aim to improve health outcomes for the patient (Fisher 1992).

The importance of engaging patients in consultations is well established in the medical literature (Stevenson, Cox et al. 2004; Coulter and Ellins 2007). From the medical literature, research has shown that being prepared for a consultation by planning an agenda and asking questions is highly valued by both doctors and patients and indicates competence in communication by the patient

(Cegala, Gade et al. 2004). However, research has shown that some or all items on a patients' agenda often remain unvoiced, resulting in misunderstandings and potential or actual adverse patient outcomes (Barry, Bradley et al. 2000). Such problems often arose due to patients not voicing their expectations, preferences, or thoughts regarding the doctor's actions and decisions (Britten, Stevenson et al. 2000) or due to doctors blocking or missing patient cues if the two participants are talking with a different purpose (Barry, Stevenson et al. 2001). This highlights the importance of establishing all of the patient's concerns during a consultation, and ensuring patient participation in consultations. Further research has shown that if patients adopt a more participative role in consultations, their doctor in turn adopts a more patient-centred approach to the consultation which supports increased patient participation (Cegela and Post 2009).

Research into patients' and pharmaceutical specialists' beliefs about medicines shows that there are considerable differences between the two (Ramstrom, Afandi et al. 2006). This has great importance when trying to achieve a patient-centred consultation. Pharmacists must try to elicit the patient's beliefs when providing a counselling service so as not to assume that the patient shares their beliefs. In addition patients need to take a more active role in the communication process to make their beliefs available to the pharmacist. Training for pharmacists needs to include awareness of the importance of eliciting patients' beliefs and the skills of how to achieve this, including active and empathetic listening (Ramstrom, Afandi et al. 2006). In common with medical consultations, patient cues are not picked up by some pharmacists, perhaps due to focus on the pharmacists' own agenda. By involving the patient in setting an agenda, and structuring the consultation well, the pharmacist may have more freedom to respond to patient cues and thus tailor the consultation (Dyck, Deschamps et al. 2005). However, it has been reported that engaging patients in the setting of agendas is not easy as patients are often unclear about topics that may be relevant for discussion during the consultation, or lack the knowledge required to prepare their own agenda (Pilnick 2002). Research has shown that pharmacists did not explore patient beliefs during consultations in a study analysing videotaped patient counselling in a mock community pharmacy (Deschamps, Dyck et al. 2003).

A fundamental way of facilitating patient involvement in consultations is through inviting questions and providing an opportunity for the patient to provide their own narrative. A Swedish study analysed tape recorded consultations to assess community pharmacists' questioning style. Out of a total of 194 questions over 42 interactions at 3 different pharmacies, only four were open questions; that is just 2%. These four open questions were asked by two pharmacists over three consultations. Using open questions provides the patient with an opportunity to participate more fully in the consultation and this was not achieved during nearly all of the recorded interactions. In addition, the study reported that during no consultations were patients encouraged to ask questions (Skoglund, Isacson et al. 2003). This is supported by earlier research which found that just 3% of observed pharmacist-patient interactions contained open questions and this contributed to a participatory approach used in just 13% of consultations (Sleath 1996). The authors defined a participatory approach as where the patient actively participates in the interaction and this was assessed by 10 variables including the use of open questions, social conversation and patient questions. These studies suggest that pharmacists may be missing important opportunities to gain information from, and provide information to, their patients. Using open questions and providing an opportunity for the patient to ask questions are key skills in establishing patient-centred consultations.

The research shows the importance of allowing patients to express their beliefs and opinions, and of taking these into account during a consultation. Pharmacists need specific skills to facilitate the sharing of beliefs and must acknowledge that patient beliefs may differ significantly from their own. This is a difficult but worthwhile area for pharmacists to explore.

The next section will explore the various factors that influence communication within pharmacist-patient consultations.

2.5 Influences on Communication

Many factors can influence the communication within a pharmacist-patient consultation and can act as either facilitators or barriers to communication. This section will explore a range of factors that have been reported to influence these consultations. External factors will be considered first, these are factors that are not dependent on either of the participants and will include resources such as time and money, information technology, location and structure provided to guide consultations. Secondly, internal factors will be discussed. These are factors that are determined by, or in the control of either participant and will include participant characteristics, patient expectations and patient communication.

2.5.1 Time

The impact of time on pharmacist-patient communication was reported in 1975 (Dickson and Rodowskas 1975) and a lack of time due to dispensing duties has also recently been reported as a barrier to taking a more proactive role in health promotion activities in the UK (Anderson, Blenkinsopp et al. 2003) and in increased patient counselling such as for asthma patients (Cairns and Eveleigh 2000).

A range of barriers to patient counselling were reported by hospital pharmacists, including lack of time, staff shortages and job specifications (Griffith, Schommer et al. 1998). An American study that may help to reduce the barrier of insufficient time attempted to help pharmacists to decide which patients would require the most in depth counselling on discharge from hospital. Older patients and those on more than three medications at discharge were found to benefit most from higher levels of counselling, resulting in increased knowledge of, and adherence to, their medicines (King, Schommer et al. 1998). A recent study has suggested that offering group counselling sessions for smoking cessation patients could be an effective way to see more patients within the same time frame as individual counselling due to the high value patients placed on group interaction (Philbrick, Newkirk et al. 2009). This would again help pharmacists to work time effectively.

Finding the time to conduct motivational interviewing in a busy community pharmacy was reported as a barrier to conducting such consultations. In addition, pharmacists found they were frequently interrupted at such busy times (Lindhe Soderlund and Milsen 2009). In consultation based roles, it has been reported that pharmacists sometimes find it difficult to stop patients talking which results in lengthy consultations (Chen and Britten 2000). When researching medical consultations it has been found that consultations do not have to be longer to meet patient needs (Jenkins, Britten et al. 2002) but pharmacy specific research suggests that it is important to maintain a minimum time for consultations. In a North American study it was found that pharmacists spent 8.8mins per patient, compared to an average for a range of healthcare professionals of 16.1mins. The research reports that pharmacists completed less of the assessed tasks during their consultations and the authors suggest that time was a key determinant of performing those care activities (Doucette and Andersen 2005).

Dutch pharmacists have reported that there is a lack of time for patient counselling (Pronk, Blom et al. 2002) and that they would like to conduct more consultations in private and on an appointment based system, without the constraints of time or remuneration. However the study reports that pharmacists had found little success with consultations by appointment due to the requirement for impromptu consultations and insufficient interest from patients. A further important finding from this study is that pharmacists were able to conduct more consultations when more than one pharmacist was present in the community pharmacy which freed up pharmacist time to conduct consultations (Kooy, Dessing et al. 2007).

It is also important to note that patients have also reported pharmacists' lack of time as a barrier to communication (Skomo, Desselle et al. 2008). Whilst pharmacists may well be pushed for time, one of the benefits of community pharmacists over other healthcare professionals is their availability to patients. If patients perceive that their pharmacist does not have time to talk to them, they are unlikely to seek advice at that time.

A lack of time has been reported as a barrier to communication in many contexts within pharmacy and is likely to continue to present difficulties due to increasing pressures to provide additional services.

The next section will explore the role of information technology in pharmacist-patient consultations.

2.5.2 Information Technology

Considerable research into the affect of computers on medical consultations has been conducted. Medical literature will be considered here due to the paucity of pharmacy-specific research in this area. The cross over seen in many other areas of communication research suggests that the effects of computers will be similar within all healthcare consultations.

A 1995 study examined the influence of computers on medical consultations at a time when computers were being introduced into general practice (Greatbatch, Heath et al. 1995). The authors report that the use of computers significantly affected the ability of the GP to communicate with their patients. Whilst using the computers, GPs often remained silent, offered minimal responses to patient comments or delayed their response until they had completed the current entry on the computer. They frequently paused mid-sentence to attend to the computer, confined eye contact to the computer screen and abruptly changed from one topic to another. Some effects were reduced as GPs became more familiar with the systems. The most pronounced effects were on social interaction that often takes place whilst a prescription is being issued and similar results have been found in other studies (Makoul, Curry et al. 2001; Theadom, de Lusignan et al. 2003). The computer also influenced patient communication as patients attempted to synchronise their talk with pauses in computer activity. The authors reported that the more successful the GPs were in keeping their use of the computer in the background of the consultation, the less effect it had on communication (Greatbatch, Heath et al. 1995). It has been found that patients are generally supportive of the use of computers in medical consultations (Ridsdale and Hudd 1994; Hsu, Huang et al. 2005).

An ethnographic study reported that using electronic health records in medical consultations could influence the consultation in a number of ways, including spatial and relational factors. Spatial factors are related to the physical presence of the computer and effects included that a fixed position of the computer monitor often disrupted eye contact but also meant that patient data was readily accessible in a range of locations. Relational factors included integration of the computer into the consultation, for example, using the computer to prompt questions or record details. The study found that physician style influenced the use of the computer within the consultation but in general the structured templates were useful for minor problems but resulted in difficulty recording patient narratives in more complex cases. During difficult consultations computer entry was often delayed until the end of the consultation to reduce influence on communication (Ventres, Kooienga et al. 2006).

Positive effects have also been reported as the computer screen could be used as a collaborative tool by inviting patients to read or refer to information on the screen, such as a list of medications or treatment information (Greatbatch, Heath et al. 1995). A computer programme has also been reported to help structure consultations by providing a logical flow and acting as a prompt for the doctor to complete all aspects of the patient's profile (Theadom, de Lusignan et al. 2003). Further studies support the benefits of computers in primary care medical consultations, however, the authors report the importance of ensuring they are well designed and meet the needs of the user, the doctor, without alienating the patient (Delaney, Fitzmaurice et al. 1999). Patient satisfaction with consultations has been shown to increase after introduction of computer systems and it has been reported that patients are accepting of this change (Hsu, Huang et al. 2005).

A recent development in medical consultations is the ability of patients to access health-related information on the internet and bring that information to the consultation. A Swiss study interviewing both physicians and patients has found both benefits and drawbacks of internet-informed patients on the consultation. There can be interactional difficulties if the internet-based information and doctor's advice do not match and this can disrupt the flow of the consultation. However, both parties reported that better informed patients were more able to participate in the consultation, offer informed decisions on treatment and more fully understood their health care. A new role for physicians is to help patients to interpret and understand the information they have gained outside of the consultation (Sommerhalder, Abraham et al. 2009).

The influence of computers on pharmacist-patient interactions has not been well researched but a Swedish study, published as a thesis, found that some pharmacists conducting a pharmaceutical care consultation looked to the patient medication record (PMR) to guide the consultation. This focus on the computer resulted in limited eye contact and lack of exploration of the patient's agenda. Pharmacists who conducted the service by making notes on paper and completing full documentation afterwards had more focus on the patient's needs by using active listening (Montgomery 2009).

The influence of computers on medical consultations has been well researched and shows that when used carefully, computers can act as a resource in the consultation and can benefit patients. However, if their use is not carefully managed, significant negative effects on communication can be seen. Research on the influence of computers in pharmacy is in its infancy but initial studies suggest that effects on consultations may be similar. There is a need for more research into the effects of computers in pharmacist-patient consultations.

The effects of location on pharmacist-patient communication will now be discussed.

2.5.3 Location

Literature relating to the effects of location on pharmacist-patient communication is based primarily in community pharmacy. Many studies explore the effects of a private consultation area on communication. The provision of a private consultation area in community pharmacies is now a legal requirement in the UK. The influence of consultation areas in community pharmacy has been reported as mixed. Previously, the use of curtains or screens to segregate areas of the shop or counter to provide privacy during consultations was common. Harper et al report that patients were welcoming of the idea of a private consultation area and that making use of a screened area of the counter resulted in an increase in questions from patients and advice given by the pharmacist (Harper, Harding et al. 1998). De Young found that whilst the presence of a consultation area did not increase the number of pharmacist-patient consultations, the length of consultations in a private area was longer than those in public (De Young 1996b). Further research has shown that only 48% of patients in a 2001 Scottish study think that pharmacists should provide private consulting rooms (Iversen, Mollison et al. 2001), but in contrast, focus group research in the USA reported patient desires for somewhere private to speak to the pharmacist (Skomo, Desselle et al. 2008).

A recent study has reported that pharmacists welcome the introduction of consultation rooms but that in many smaller and independent pharmacies the consultations rooms were ‘shoehorned’ in to already tight spaces or else were jointly used for the storage of stock. Pharmacists working at larger pharmacies and multiples reported that consultation rooms were comfortable and looked professional. The authors suggest that providing dedicated space for consultations is essential to avoid the impression that pharmacists are ambivalent about its use (Rapprt, Doel et al. 2009).

The importance of privacy when conducting consultations for EHC has been reported by both pharmacists and patients (Anderson and Blenkinsopp 2006). In addition it has been found that conducting detailed, private consultations with patients helped community pharmacists to enhance their professional status and to improve patient perceptions of pharmacists (Bissell and Anderson 2003).

For a long time pharmacists have acknowledged the need for privacy during patient counselling (Kirking 1982) and noisy consultation areas have been reported as a barrier to building relationships with pharmacists (Lyra Jr, Rocha et al. 2007). It has been found that the provision of a dedicated consultation area in a community pharmacy resulted in consultations moving away from the counter. This was noted to be to a quiet area of the shop or the dispensary as well as the consultation room and afforded increased privacy to patients (Harper, Harding et al. 1998). However patient privacy was not found to significantly affect communication in an American study (Schommer and wiederholt 1995). Further exploration of the influence of privacy on pharmacist-patient consultations has been suggested (Shah and Chewning 2006).

Pharmacists are aware of the importance of providing a private environment for patient consultations. Regulations governing the provision of private consultation areas have increased the number of such areas which may in turn increase pharmacist awareness of the need for privacy. Private consultation areas have been shown to increase the length of consultations, the number of questions asked, and the amount of information given but have not been shown to increase the number of consultations. There have been no studies investigating the communication style used within consultation areas and a study of the effects on the communication process itself would be pertinent to see if the interaction changes with location.

This influence of structure will now be discussed.

2.5.4 Structure

The structure of a health care consultation is usually guided by the practitioner conducting the consultation. However structure can be guided by the provision of externally prepared protocols, guidelines, mnemonics or procedures. Such guidelines are commonly used in healthcare (Swinglehurst 2005) and have been used by pharmacists, for example, when conducting structured medicines reviews for patients with knee pain (Phelan, Blenkinsopp et al. 2008).

A Scottish study has shown that pharmacists positively viewed the introduction of a standardized care plan for recording the treatment of mental health patients (Fraser, Fraser et al. 2009). However, the pharmacists reported that changing the plan to accommodate local circumstances and provide space for full answers rather than tick box questions, would improve the care plan. The authors suggest that there are difficulties in making one plan fit all occasions.

A national four year programme to improve pharmacist-patient communication about medicines was carried out in Finland. As part of the programme, guidelines to help structure a consultation were issued. Those pharmacists who used the guidelines found them useful in learning to structure consultations. Stated barriers to using the guidelines were their length and comprehensiveness. The use of guidelines may help pharmacists to structure patient counselling but their implementation would have to include training on how to use them in practice and a shorter guideline may need to be produced. (Puumalainen, Kansanaho et al. 2005)

A UK study using simulated patients to assess consultation skills, recorded the use of a checklist during requests for EHC. Checklists are provided by the RPSGB to community pharmacists to support EHC consultations. The study found that in the first of two scenarios: no checklist was used in three consultations; a checklist was used, but was not a barrier to communication, in nine consultations; and that a checklist was used and was a barrier to communication in a further nine consultations. In the second scenario, the data is combined and reports that a checklist was not used or was not a barrier in 13 consultations, and was used and did act as a barrier to communication in six consultations (Weiss, Booth et al. 2010). No assessment of the success of structuring a consultation without a checklist was reported and it is not clear from the data presented whether consultations without checklists covered all of the clinically relevant topics. However, it is interesting to note that in scenario 1, a checklist was used in 18 of the 21 consultations assessed which suggests a strong preference for pharmacists' use of checklists. If pharmacists maintain high levels of checklist use, it is important they understand how to use them without negatively influencing communication.

A study following the use of a paper-based template in nursing consultations found that nurses varied their utilisation of the template during consultations. Some used the template to fully structure the consultation whilst others used the template as a guide but topics and questioning style were moulded to the individual patient. When the guides were strictly adhered to, patient answers were often cut short and consultations became less patient-centred (Jones 2009).

Computers have also been reported to help structure consultations by providing a logical flow to the discussion if used appropriately, but can limit recording of patient narratives as reported above (Theadom, de Lusignan et al. 2003; Ventres, Kooienga et al. 2006).

Research has explored the use of mnemonics known as WWHAM which provide a protocol for gathering patient information in community pharmacies by medicines counter assistants (Banks, Shaw et al. 2005). The research showed that good use was made of protocols and that staff were positive about using them. Difficulties in using mnemonics were found when customers did not want to answer questions from the protocol and informal strategies were needed to deal with these situations. In contrast, data has also been reported demonstrating poor use of pharmacy mnemonics by counter assistants, with most consultations containing just two of the five questions provided in the protocol (Watson, Hart et al. 2008). In further research (Banks, Shaw et al. 2007) the authors report that the use of mnemonics and protocols may be too limiting to accommodate the complex interactions that medicines counter assistants undertake. This suggests that the use of protocols in pharmacist-patient encounters could be useful but must be accompanied by an understanding of how and when to deviate from the protocol and the communication skills required to do this. This is supported by research exploring evidence-based guidelines which outlines a large number of benefits for practitioners, organisations and patients but stresses the importance of clinical expertise in implementing them (Swinglehurst 2005). Difficulties with using protocols and rule-based systems have also been reported in studies of NHS Direct which have found that nurses often deviate from the predefined questions or advice prompted by the computer algorithms and instead utilise their professional knowledge to tailor advice to patients (Greatbatch, Hanlon et al. 2005).

The role of routines in healthcare organisations has been reported with regard to collaborative working (Greenhalgh 2008), where routines are described as recurrent behaviour patterns. Working according to a routine allows the individual to make common decisions at a subconscious level which in turn enables the individual to conserve cognitive function for non-routine activities. Routines can add structure to workplace environments, including consultations, and can save time and cognitive resources for tasks that really require them. Routines may be able to help pharmacists to structure consultations but must however be open to review and change to ensure that practices remain effective and efficient.

Pharmacists can make use of a variety of resources to structure consultations, ranging from rigid templates and protocols to the more flexible use of routines. Providing structure to a consultation can help to reduce uncertainty for both participants and increase the efficiency and effectiveness of consultations but pharmacists must be aware of the need to deviate from guides in order to meet the needs of individual patients.

The next section will consider internal influences on pharmacist-patient communication.

2.5.5 Internal Influences

A range of internal influences on the communication between pharmacists and patients have been reported. As described above, these are factors that are determined by, or in the control of either participant. It has been found that gender has an influence on the outcomes of medication history taking in pharmacy students, with same-sex and opposite-sex dyads seeing different skills in use (Gettman, Ranelli et al. 1996). However similar research would be needed in qualified pharmacists to see if any differences still exist once training has been completed.

A study investigated a range of factors in community pharmacy settings to assess their influence on different aspects of communication. With respect to participant variables, it was found that the extent of adoption of specific roles by the participants was a key factor. If a pharmacist adopted a ‘pharmacist counsellor role orientation’ they were more likely to initiate communication with a patient. In addition, if a patient adopted a strong ‘patient counselee role orientation’ the length and content of communication was likely to increase (Schommer and wiederholt 1995).

Participant expectations have also been reported to influence communication but data is not specific to pharmacy. Research has shown that patients’ expectations of consultations may have less influence than the doctors perceptions of those expectations (Britten 2004). One of the differences between pharmacy and medical consultations may be the nature of patient expectations. For example, in the medical literature, expectations are linked to specific requirements such as a prescription whereas in pharmacist-led consultations, the patient may not have focussed expectations due to less awareness of the pharmacists' role in this context. A recent study conducted in America found that diabetic patients do expect that their pharmacist can help to educate them about possible side effects from their diabetes medication, and how to pay less for their medicines but do not have specific expectations of the consultation (Hermansen-Kobulnicky and Worley 2008).

Finally, patient communication has been shown to influence communication within consultations. A study has shown that Welsh-speaking patients feel more comfortable with a Welsh-speaking pharmacist, and found it easier to explain their symptoms and asked more questions about their medication in their first language (Hughes, John et al. 2009). This study highlights the importance of communication in the first language of a patient wherever possible. Pharmacists and assistants from an ethnic minority background believed they had an important role in communicating about folic acid with customers from the same ethnic background (Anderson and Rajyaguru 2002).

There are a wide range of factors which may influence a pharmacist-patient consultation. Some of those are not modifiable, for example gender; some are modifiable but outside of the control of the individuals, for example a law requiring the provision of a consultation room or a nationwide programme, and some can be altered by the participants, such use of information technology. It is important that pharmacists are made aware of the differences that external factors can have on a consultation and how to ensure that the consultation achieves the best possible outcome despite, or because of, those factors.

2.6 Gaps in the Literature

Communication research within health care has historically been focussed on the medical profession and a large body of evidence exists. Research specifically exploring pharmacist-patient interactions is less abundant but growing. A key finding from this review is the importance of using direct methods to assess communication rather than proxy measures, such as patient understanding or adherence.

The literature relating to pharmacist-patient communication under utilises recordings of interactions and as such there is little interactional analysis. This review has also found that patient perceptions of communication are not always reliable and so should be combined in studies of multiple perspectives and multiple methods, for example, with direct analysis of audio or video recordings of consultations to allow detailed exploration of the communication. Linking of participant perceptions to actual practices would help in understanding the influence of communication on participants. Research of communication between pharmacists and patients is currently based heavily on quantitative research. In order to explore this area more fully, additional qualitative studies utilising direct consultation data are required.

This review has highlighted specific areas which require further research. Identification and verification of a tool to assess pharmacist-patient communication which is applicable to a wide of range of settings, including teaching and research, would help to coordinate future findings and facilitate their integration into teaching and practice.

Topics for future research include interpersonal relationship development and the communication process from the patient’s perspective. The use of computers within pharmacist-led consultations is in need of more extensive research to establish if the findings in the medical literature are relevant to pharmacy. Currently there is very little research in this area. Finally, the influence of location and privacy on the communication process needs more thorough investigation due to variation in initial findings.

Chapter 3.Methodology and Methods

3.1 Introduction

This study aims to explore communication between pharmacists and patients and a qualitative methodology was chosen to facilitate in depth investigation. Methods included the use of semi-structured interviews with pharmacists and patients and audio-recording and observation of consultations. The methodology and methods underpinning this research will be explored in greater detail in the following sections.

3.2 Choice of Methodology

This section will describe how the chosen methodologies were selected and why they are appropriate to the research aims. First, the details of the methodological background will be considered, and then choice of the study setting.

3.2.1 Methodological Perspectives

My project has been shaped greatly by my background as a pharmacist and my first year as a PhD student. I completed the pre-registration year of my training at Derriford hospital in Plymouth and spent a large proportion of my time on wards with other pharmacists and healthcare professionals. I learnt a great deal from these ward visits, both clinically and professionally, and one of the most significant to me was the role of communication. The care of each patient was greatly influenced by the communication of the health care professionals looking after them. There was variation in all aspects of communication, the style, language, length, mode etc both with the patient and between professionals. This sparked my interest in communication and I began to watch more closely how individual pharmacists communicated with their patients and how different patients responded to each pharmacist.

Consequently I began my PhD with the aim of exploring pharmacist-patient communication in hospital inpatient wards. I planned the research to be qualitative as I hoped to discover the thoughts and opinions of pharmacists and patients as well as exploring the current use of communication. Qualitative research has commonly been used to explore and describe various aspects of professional practice from the viewpoint of the participants and to answer how and why questions in research (Smith 2002). This matches the exploratory aims of this research project and makes qualitative research an appropriate choice.

Quantitative research could have been used to answer the aims of this study, for example to assess the frequency of use of a predefined set of communication skills, or to send out a questionnaire to a large number of participants to ask their opinions of the communication between pharmacists and patients. These would be valid attempts to address the aims of my research; I did not however want the study to be restricted by my prejudices and opinions in designing a questionnaire or to limit the aspects of communication that I explored. I planned to give participants the opportunity to discuss what was important to them about communication in their own time and words. I aimed to begin data collection with an open mind and to look for different aspects of communication to see what was actually happening in consultations. I felt that this would only be possible using qualitative techniques.

Having decided to base my research in qualitative methods, consideration of the methodology in accordance with the aims of the study, led to adoption of an approach based in grounded theory.

Grounded theory was developed by Glaser and Strauss and is a method based in analysis that generates theory from research grounded in data, rather than generating new hypotheses from previous theories (Glaser and Strauss 1967). Glaser and Strauss sought to challenge prevalent beliefs of the time that qualitative research could not produce rigorous results and theories and to raise the profile and value of qualitative research through application of thorough and systematic analysis of the data (Charmaz 2006). Grounded theory is based on a set of defining principles outlined by Glaser and Strauss including, principally, the generation of analytic codes and categories from the data and not from preconceived hypotheses. In order to create such codes the authors provided guidance on the method of constant comparison of the data during each stage of the analysis and advancing theory development as analysis progresses. The methods underpinning grounded theory research involve codifying the data into categories and creating memos to elaborate on properties of those categories and their relationships with other categories. The memos and relationships are explored and gaps identified. Glaser and Strauss thought it was key to have simultaneous involvement in analysis and data collection and the gaps discovered in category relationships informed the continued data collection. The authors stressed that the literature review should be conducted after analysis so as not to influence the analytic process. They stated that studies should be aimed towards generation of theory rather than data representative of the population and sampling should be defined accordingly.

The principles of grounded theory, and the methods described by Glaser and Strauss can, and have been, applied and developed in a large number of ways. This study draws on these methods as guidance and principles rather than strict rules, as described by Charmaz (2006). In order to follow all of the requirements underpinning Glaser and Strauss's original method requires a separation between the researcher and the research environment, including both the research participants and the data collected. Charmaz argues that is not possible to fully extricate oneself from previous experiences in order to conduct purely objective analysis of the data and, further, that the researcher is an active participant in the environment they research whether by interview, observation or other method of enquiry. In fact, prior experience can help in interpretation of the data and relation of findings to the research context. Knowledge of the research environment provided either through literature or personal experience can also help to focus initial aims and objectives of the research. It is often the case that personal experience can spark interest in researching a particular topic and so has already influenced the data to be collected before the study begins. My thoughts on the place of prior knowledge align with those presented by Charmaz and I acknowledge that it is not possible to detach oneself from past experiences in order to analyse data with a blank page to start from. Therefore, this study is conducted on the basis of the adapted principles of grounded theory.

This chapter will continue by exploring the choice of locations in which to base the study.

3.2.2 Study Setting

As my PhD progressed it became apparent that conducting a study such as this to explore general communication in community pharmacy or on hospital wards would present a range of problems. Firstly, if I aimed to observe the communication between pharmacists and patients, my own experience told me that I may need to be shadowing a pharmacist for some time before I had observed sufficient communication to gain valuable data. In addition, in either a community pharmacy or hospital ward setting, it would be difficult to ensure confidentiality in any recordings due to the possibility of other nearby interactions being recorded on the tape. This would have resulted in complicated consent procedures targeting anyone in the area of the recording equipment. This would have been particularly difficult on a hospital ward as some patients may not be able to give informed consent.

I therefore decided to conduct this study on clinic-style consultations defined as any appointment based consultation between a pharmacist and their patient, where both parties were aware of the general purpose of the consultation in advance. A characteristic of ‘clinic-style’ consultations is that they usually take place in a private area or room, meaning that informed consent was only required from those participants directly involved in the consultation, and there was no danger of accidental recording of data from other parties. In addition, appointment based consultations facilitated the early provision of information to potential participants, and allowed them time to consider their involvement. Also, observing a clinic consultation enabled focussed data collection targeting only communication-rich aspects of the pharmacist’s role and eliminated the need for opportunistic data collection. In relation to informed consent, patients recruited to the study were given a minimum of 24 hours notice to consider their involvement in the study, and to give informed consent to take part. This made the requirement for an appointment based consultation essential. Many pharmacist-patient consultations are not planned, either in community pharmacy or hospital settings which would result in patients having minimal time to consider participation. Finally, clinic-style, appointment-based consultations are relatively new to pharmacy and researching communication in this context may enable this research to influence their development at an early stage.

There were no pre-defined requirements of the content of the consultation, only that consultations should be appointment based, and conducted in a private room or area. Thus pharmacists from both hospital and community pharmacy were approached to participate in this study. It was hoped that a range of clinic-style consultations could be observed to gather data from a range of contexts.

The next section of this chapter will describe the methods chosen to conduct this research study.

3.3 Interviews

Interviews are a commonly used method for data collection in both quantitative and qualitative research. They can take a range of forms, from informal conversations to conducting a questionnaire in person, and can fall anywhere along the scale in between. The type of data generated from the different style of interviews can vary enormously, from anecdotal extracts to numerical and statistical analysis. Whatever the type of interview, it is essential to consider that all interview talk is both socially and contextually constrained (Murphy and Dingwall 2003).

When considering any interview data, but particularly when the interview aims to assess the participants’ perceptions, it is important to remember that interview accounts are not objective representations of the participants’ thoughts or actions. The participant may have a number of agendas in producing an account during an interview and interviews should be viewed as a social interaction where the interviewees strive to present themselves as competent and responsible members of their community (Murphy and Dingwall 2003). During an interview the participant will seek to provide answers which depict socially acceptable thoughts or behaviours and to reduce the extent to which their actions can be negatively judged by the researcher. They may seek to ‘please’ the researcher and show an interest in the research topic which may not have existed prior to the interview. In a different context, for example coffee with a close friend, the respondent may offer a different account of their thoughts or actions. This does not mean that an account given in an interview is false or not valid but that consideration must be given to the purpose of the explanations given, and the influence of the context on that purpose (Murphy and Dingwall 2003).

Interviews can be used to access a range of types of information, including an interviewee's report of a particular event or their thoughts and opinions. There are differences in the process required to obtain these types of information. Asking a participant to recount their version of an event requires that participant to recall the events and interpret them, before formulating their description to give during the interview. Any person present at the particular event could produce a different account and each still be valid. There are many influences on what is reported during an interview, what the participant noticed during the event, what they remember during the interview, how they interpret what they observed or experienced, and what they may feel is important to them, or to the interviewer to report. Thus each interviewee may report a contrasting report of events, but they could all be valid representations of the event and can be treated as such.

Secondly, asking interviewees about their thoughts or opinions does not require recollection of a specific event but aims to help the interviewer 'put themselves in the participant's shoes' and to try to understand how the participant interprets the world around them. Interviews can provide access to otherwise unknown rationales and assumptions about the interview topic, but cannot be used to ascertain why people behave the way they do (Murphy and Dingwall 2003). It is important to remember that people's opinions change depending on the context and that ambivalence is common. This can result in varying responses according to the situation and the people present. It is important to consider how the interview context may influence the participant's responses during analysis of interview data to ensure that bias is identified where possible.

I believe that interviews can be used to gain an understanding of participants' views, opinions or accounts, and that these offerings are valid representations of the notion described. However, I feel that these accounts are valid only when considered in the context in which they were given and with an awareness of the influences of each context upon those accounts.

The different interviews conducted in this study sought to access the participant's description of an event, in this case the consultation, and their thoughts and opinions about a range of topics including communication within the consultation. A number of influences may have affected the participants' responses during the interviews conducted (Murphy and Dingwall 2003). I will first consider influences on the pharmacist interviews. All of the pharmacists participating in the study were aware of my background as a UK qualified pharmacist. This may have influenced the pharmacists in a number of ways. Firstly, the pharmacists may have felt that being researched by a fellow professional would allow a level of understanding of the participants' own environment. It would be expected that another pharmacist would understand the workplace pressures, difficulties, requirements, benefits and relationships without need for detailed explanation. This may have facilitated the pharmacists' responses and provided some encouragement that pharmacists' views would be understood. However, my status as a pharmacist may also have hindered responses. The nature of the awareness and understanding outlined above could also enable me to judge the pharmacists responses or actions (in the interview or consultations), according to my own knowledge. This may have made the pharmacists nervous during the consultations but could also have influenced responses during the interviews. The pharmacists could have attempted to offer explanations to reduce any negative judgements of their performance during the consultation. For example, describing difficult working conditions or insufficient training would serve to limit the responsibility of the pharmacist for any poor performance. In addition, the pharmacists were aware that the study was exploring communication skills. This may lead pharmacists to give greater emphasis to communication than they would outside of the study, in order to present helpful accounts for the research, and to give a favourable view of themselves as pharmacists concerned with communication.

Ten of the eleven pharmacists were interviewed at their own place of work. This may have served to relax the pharmacists as they were in a familiar and comfortable environment. The presence of a researcher may also have affected relationships with colleagues by generating an interest in the study and the pharmacists' involvement. This could again influence accounts given if the pharmacists were seeking to portray a particular image to their co-workers. A significant influence to these interviews was the pressure of work commitments, and a need to get back to duties. Although interviews were conducted at a time of the participant's choosing, the pressures of a busy working environment can pervade the interview space. The final pharmacist was interviewed in an interview room at the university. This avoided difficulties with work pressures and impressions of colleagues but the pharmacist may have felt increased pressure to give academic or 'clever' responses in order to appear as a competent interviewee. The pharmacist may also have felt less comfortable due to the unfamiliar environment.

The interview process could also have influenced patient accounts in a range of ways. As described above, the patients may have been keen to present themselves as supportive of the research topic due to an awareness of my interests. In the case of the patient interviews, this could have been as someone who values the input of their pharmacist, or someone with an interest in communication skills. The patients who had previous relationships with their pharmacist may also have been influenced by a desire to praise or show loyalty to their pharmacist. Patients may have felt more or less 'useful' to the study depending on the number of medications they take, or the complexity of the consultation and may have aimed to be as helpful to the study as possible during the interview. All patients were interviewed at the location of their consultation. This may have made it difficult for patients to give negative accounts of their consultation or negative views of pharmacy due to the proximity of the pharmacist, despite the provision of private rooms for interview.

The context of each interview could have exerted a large number of effects on the accounts of the participants and these must be kept in mind when considering the data and analysis presented during this thesis.

More detail about the topics discussed in the interviews conducted will be given in the data collection section of this chapter. This chapter will now move on to explore the other methods used in this study; observation and audio recording.

3.4 Capturing the Consultation

In order to explore the communication that took place during pharmacist-patient consultations, two additional methods were combined to provide a full picture of the interactions. These two methods were audio-recording and observation. Each will now be discussed in more detail.

3.4.1 Audio-Recording

All consultations were audio-recorded to provide an accurate record of the verbal communication that occurred during the consultation and to allow detailed analysis. A second option for capturing the consultation would have been video recording but it was decided to use audio-recording, rather than video, for a number of reasons. Video recording would provide a detailed record of both verbal and non-verbal communication but in this instance it was decided that the drawbacks outweigh this benefit. This is an exploratory study and such detailed analysis of non-verbal communication is not within the scope of this research; observational notes should provide a sufficient level of detail (see below). Video cameras can only capture one angle of the situation, unless you move the camera during the consultation or use multiple cameras. Moving cameras during filming may result in missing important information, or a bias over what is recorded and installing multiple cameras can be costly, complicated and disruptive (Heath, Hindmarsh et al. 2010). Both patients and pharmacists may feel the video camera is more intrusive than audio recording and may feel uncomfortable during the consultation or reluctant to take part at all; this is likely to be intensified by the use of multiple cameras. Detailed training would be needed on how to use the equipment and importantly, how to analyse and transcribe video footage. Analysis of video footage is a complex and time consuming task and in general, only small sections of video footage can be fully transcribed to include participant actions. Participant confidentiality and data storage is also more difficult to control, particularly in published data (for example blanking out faces in images). For all of these reasons, I chose to use audio-recording supplemented with observational notes, rather than video recording.

3.4.2 Observations

Observation is another frequently used method in both qualitative and quantitative research. The objective is commonly to provide insights into the behaviours of people and the things in their environment that facilitate or present difficulties to those actions. There are two broad types of observation: participant and non-participant. Participant observation involves the researcher becoming an active part of the situation that they aim to observe, for example, working as a teaching assistant if studying classroom activities. This process allows complete immersion in the context and prolonged access to the participants in order to explore the way in which people and the environment interact together. Non-participant observation usually involves shorter and distinct periods of observation where researchers stand aside and write field notes during observation, rather than taking an active part in the interactions. Notes can range from formal structured and quantitative notes to unstructured thoughts and observations. Non-participative observation enables the researcher to record details of the events occurring during the study period as an outsider to the specific location or context being observed. A non-participant observer aims to be as discreet as possible so as not to influence the behaviours of those they are observing thus affecting the data collected. This will be discussed in more detail later in this chapter with regard to the Hawthorne effect. I chose to conduct non-participant observation for this study as I wanted to explore in detail a selection of specific events i.e. consultations, rather than an overall picture of the consultation environment.

A concern with non-participant observation in a field known to the researcher, is the temptation to intervene, for example, if the wrong medication was dispensed to a patient. Consideration of the situations that may arise during pharmacist-patient consultations was essential due to my qualification as a pharmacist. The nature of the consultations to be observed did not include any tests or investigations that could cause direct harm to patients during the consultation and, therefore, I decided not to intervene during consultations. This would limit my influence on the consultation. If I had substantial concerns over a patient's safety, those concerns would be raised with the pharmacist directly after the consultation and prior to the patient leaving, where possible, so that changes could be implemented where necessary.

Although observation aims to provide an account of events in any given situation, it is important to note that the observer plays a key role in determining which details are recorded in the field notes. This can have significant influence on the data and subsequent analysis. Choice of what to record can be influenced by many factors, including the researcher's background, the objectives of the study and the method of analysis. The purpose of the field notes in this study was to aid in contextualisation of the audio recordings of pharmacist-patient consultations. The field notes were therefore not subjected to independent analysis but were reviewed alongside analysis of the consultation recordings. The notes helped recall of the particular circumstances and context of the consultation, for example running late or computer problems. The notes also helped to clarify events that occurred during the consultation, for example, interruptions or talk that was linked to particular physical action that may otherwise be lost in transcription.

This chapter will now move on to explore the concepts of validity and reliability within this research study.

3.5 Validity and Reliability

The validity of data has been defined as the extent to which data are an accurate reflection of the phenomena under study (Smith 2002), or alternatively, as 'Is the data true?' (Silverman 2005)

The validity of data can be defined in a number of ways and can be influenced by a large number of factors and this section will first explore issues of validity concerning the interview data. Participants were encouraged to lead their interviews to areas or topics that interested or concerned them, in this way the data demonstrated content validity through discussion of the participant’s agenda. However, some bias will be introduced since, despite giving freedom to participants, the general topics for discussion were determined by the interviewer and defined in the interview guide (Smith 2002).

Validity can be compromised if participants do not feel free to express their thoughts or opinions, for example, being asked for thoughts on the quality of a service by the individual who has provided that service (Smith 2002). I did not work in any of the settings explored during this study and, as such, was seen as an outsider to the participants. However, I am a qualified pharmacist and this was known to all pharmacist participants prior to their involvement in the study. I was introduced to patient participants as a researcher and not as a pharmacist but patients commonly asked about my background and all patients were aware that I was a pharmacist by the end of their involvement in the study.

All participants were offered a choice of location in which to conduct their interview, either the pharmacy setting (i.e. community pharmacy/clinic environment), the participant’s home, an interview room at the university or a suitable location of the participant’s choice. Conducting interviews at the participant’s home has been reported to increase the validity of the data by reducing influence of the setting and practitioner as described above. However, as patients were involved in three distinct aspects of data collection, all patients elected to conduct their interviews at the location of their consultation to enable completion of all study tasks in one session. One pharmacist was interviewed at the university; all other pharmacists were interviewed at their place of work as this was more convenient for them. All interviews were conducted in a private room but there were interruptions on occasions. The researcher paused the interview until privacy was re-established in these instances. In some patient interviews the participant’s spouse was present. As all recordings were transcribed verbatim, contributions from the spouse were also transcribed. In each case the spouse was present when consent was obtained and was aware of all aspects of the study. However, quotes from the participant were prioritised and no quotes from a spouse are used in presentation of the findings.

This section will now consider validity of the consultation data, both audio recording and observation.

Conducting research by a process of non-participant observation necessitates that a researcher must be in a position to see clearly what is going on. This means that the researcher must be present 'in the middle of things' whilst trying to remain as unobtrusive as possible. In order to observe what ordinarily happens in any situation, the researcher must have as little influence as possible on those events. It is accepted that by being present, the researcher will have some influence on events and this is known as the Hawthorne effect. Acting to minimise these effects is essential in order to obtain as accurate, and therefore valid, data as possible (Smith 2005).

In order to remain unobtrusive in this study, consideration was given to the influence of clothing and I wore a simple outfit of black trousers and a plain top that was not a shirt. This was considered to be smart enough to demonstrate professionalism as a researcher, but approachability to facilitate participation in interviews, and distinct from the pharmacists who were generally more smartly dressed. Since I was present in a private consultation it was not possible to disguise the process of observation. I was positioned in the least obtrusive position in the room whilst still being able to observe proceedings. In practice this usually meant sitting as far back as space allowed within the room but on some occasions this was difficult due to extremely small room sizes.

The Hawthorne effect was further reduced by getting to know both participants during interviews prior to the consultation. This served to create an easy atmosphere as a friendly rapport had been established, particularly with patients. Building relationships and familiarity with pharmacists as the study progressed also helped to minimise influence. Anonymity, confidentiality and the breadth of data to be observed were stressed to participants so that they did not focus on altering any particular aspect of their behaviour.

It has been suggested that participants become habituated to the presence of a researcher over time and that data collected as the observation progresses is close to normal behaviour (Smith 2002). It can require substantial effort to consistently alter personal behaviours in order to present a ‘good side’ to the researcher. This study aimed to observe 5-10 consultations per pharmacist so that any differences in pharmacist behaviours due to researcher presence could be identified.

In health services research the assertion of the validity of data through the process of triangulation is common. Triangulation considers data collected by more than one method or from more than one source. This enables researchers to compare different perspectives of the same event or experience and builds a more comprehensive understanding of the issue under investigation; if both sources confirm the same findings, the research is thought to be valid, that is, an accurate representation of the subject studied (Smith 2005). The addition of data collected by a complementary method can add to the depth of analysis possible and methods can be combined to add contextualisation to the data (Smith 2002).

Some studies combine data collected from methods with different philosophical assumptions, such as qualitative and quantitative methods, but concerns have been expressed over this difference in epistemological background and whether the data can be appropriately integrated in a single study (Smith 2002). However Silverman has argued that presenting frequency data alongside qualitative analysis can help interpretation of data (Silverman 2005). It has been reported that pharmacy practice researchers are often led by pragmatism rather than philosophical considerations when selecting methods and that mixed methods are used to answer different aspects of the research aims and objectives, in addition to providing triangulation of data (Smith 2002).

This study makes use of triangulation within a single qualitative paradigm by using interviews with both patients and pharmacists, observation of consultations, and audio-recording of consultations thus providing four data collection methods within the same philosophical constructs. This enables comparison and integration of data without concerns over the conceptual frameworks.

The reliability of data can be described as the reproducibility or consistency of the data. The data analysis was conducted primarily by the chief investigator; however, to ensure the reliability of the analysis, sections of coded data were reviewed by three experienced researchers. The researchers reviewed the analysis in two ways; firstly sections of coded transcript were reviewed to establish agreement on the codes assigned to each section of the data. Secondly, the data contained within individual codes was reviewed to establish agreement that the data assigned to the code was representative of the meaning of the code. This confirmed that the categorisation was reproducible and that coding of the data was consistent.

All interviews were conducted by the same researcher which removed the possibility of difficulties with inter-researcher reliability (Smith 2002). It is important to note that this qualitative study was aiming for reproducibility within the data and not for all views to support each other, in fact different opinions add depth to the analysis and prompt more detailed exploration of the data.

The next section will describe the sampling process used in this study

3.6 Sampling

Purposive sampling was used to identify the pharmacist participants for this study. Purposive sampling involves the researcher selecting those members of the population who might be expected to be the most informative in meeting the aims of the study, for example those with particular experiences or characteristics (Smith 2005). In this study pharmacists known to the researcher or colleagues to conduct pharmacist-patient consultations were approached. The study aimed to recruit pharmacists from both hospital and community pharmacy in order to explore variation between settings. Difficulties in recruitment explored later in this chapter resulted in convenience sampling in an attempt to boost recruitment levels.

The pharmacists recruited to this study were responsible for the recruitment of patients. The researcher therefore had no influence on the sampling strategy utilised by the pharmacist participants. Patients recruited in community pharmacy are likely to be those known to the pharmacist as open to the idea of involvement in research since none of the patients referred to the researcher declined to participate. This may introduce bias to the research data. In hospital pharmacy only one pharmacist recruited patients. All patients attending the clinic with appointments made far enough in advance to enable postage of study documentation were invited to be involved in the study. Recruitment ceased when the target of 10 patients had been recruited.

Sample sizes in qualitative research have been reported to usually fall between 15 and 50 although there are cases outside of these values (Smith 2002). Qualitative research requires detailed and in depth analysis of the data which prevents extremely large scale studies. The sample size was not calculated by conducting a sample size calculation but was an estimate of the numbers needed to reach saturation of the data. Saturation is the point at which no new themes are emerging from the data and new data serves to consolidate that which has already been collected. The researchers estimated that data would reach saturation at between 30 and 50 cases, the exact end point to be determined through analysis of the data.

Since a purposive and then convenience approach to sampling was used, the data obtained in this study are not generalisable and cannot be said to be representative of a wider population. They must therefore be considered with this in mind but can provide insight into the views of the participants and the communication content of consultations, and also as a base on which to inform future research.

The following section of this chapter will describe the ethical considerations of this study.

3.7 Ethical Considerations

Full ethical approval was obtained from the Derbyshire Local Research Ethics Committee (LREC) and from relevant Research & Development committees. As part of the East Midlands Strategic Health Authority, the study was assigned to the local LREC with the next available meeting and so was reviewed by the Derbyshire LREC. Copies of approval letters can be found in appendix 2. This ensured that the procedures set out for this study adhered to strict ethical standards for NHS research in the UK. A lone-worker policy was developed and approved by The School of Pharmacy, The University of Nottingham, to allow interviews to be conducted in patient homes with due regard to researcher and participant safety.

To ensure confidentiality, each participant was allocated an identification code which was used on all documentation and transcripts relating to an individual participant. The list linking participant name and codes was only available to the chief investigator. It was stored in a locked drawer away from the data itself. Any direct quotations used were fully anonymised prior to publication. All personally identifying information from any data collected was removed before publication of any material. Data was stored securely in the University of Nottingham during the study and will be stored in the secure School of Pharmacy archive room for 10 years after the study has ended. All data will then be destroyed. Any data stored electronically is fully password protected.

The researcher did not have access to patient medical records during the study and only authorised researchers have access to view identifiable data. All personal information collected during the course of the research is kept strictly confidential.

Informed consent was obtained from all study participants. All participants were provided with details of the study at least 24 hours prior to giving consent. The participant information forms and consent forms for both pharmacists and patients can be seen in appendices 3 and 4 respectively.

3.8 Recruitment

Recruitment to this study had two phases; pharmacist recruitment and patient recruitment, and both will be explored in this section. The section will conclude by exploring some of the difficulties faced during recruitment to the study. Firstly, pharmacist recruitment will be described.

The study initially aimed to recruit six pharmacists (three from hospital pharmacy and three from community pharmacy) and 5 – 10 patients per pharmacist. The main data regarding pharmacist-patient communication would therefore come from a large range of consultations and supporting patient interview data. This would be supplemented with data from the pharmacist interviews, and the literature.

Pharmacists were identified by purposive convenience sampling and were known to the researcher or colleagues to conduct clinic-style consultations such as those required by the study. Six pharmacists were approached and all agreed to participate in the study. The sample included three community pharmacists conducting either medicines usage reviews (MURs) or smoking cessation services within the Nottingham City Primary Care Trust and the Nottinghamshire County Teaching Primary Care Trust, and three hospital pharmacists, all conducting appointment based consultations as part of clinics within the Nottingham University Hospitals NHS Trust. The three community pharmacists were selected from those pharmacists known to the researcher to conduct clinics within their pharmacy. The community pharmacists approached were purposefully chosen to have different types of pharmacy or different locations. Two of the community pharmacies are independent pharmacies, and one was part of a medium sized multiple. At the time the study began, there were only three pharmacists conducting clinics with adult patients within Nottingham University Hospitals NHS Trust and all were recruited to take part in this study.

This section will describe the recruitment of patients to the study.

Pharmacists were involved in the recruitment of patients from their clinics. For community pharmacists, prospective participants were identified when they were making appointments for their clinic consultations e.g. MUR, or smoking cessation. The patients were given a letter of invitation to take part in the study and if they agreed, patient contact details were recorded on the form provided. This form was either returned to the pharmacist who passed it on to the researcher, or was posted directly to the researcher by the patient, using the prepaid envelope provided. The researcher made contact with the patient after a minimum of 24 hours to arrange a meeting, at which the patient was given a patient participant information sheet and written consent was obtained. The letter of invitation to the study can be found in appendix 5.

For hospital pharmacists, prospective patients were identified during their inpatient stay or upon referral to the clinic. Letters of invitation to the study were given or posted to patients along with a contact details form by the clinic pharmacist. Those wishing to be involved in the study returned the form as above and again the researcher made contact to arrange a meeting after a minimum of 24 hours. A patient participant information sheet was given and written consent obtained at the initial meeting.

Finally the difficulties faced during recruitment of participants will be explained.

During the pilot study, pharmacist 1 was asked to recruit two patients to the study and this was successfully achieved, indicating that recruitment should not be an issue for the main study. Six pharmacists were approached regarding the study during submission of ethics applications and all were enthusiastic and agreed, in principle, to be involved. The pharmacists at this stage did not raise concerns over recruitment. When ethics, and research and development approvals had been obtained, the same six pharmacists were successfully recruited to the study. At this stage two of the hospital pharmacists expressed concerns about recruiting large numbers of patients but were confident that some would be recruited. The third hospital pharmacist successfully recruited 10 patients to the study.

In community pharmacy there were also concerns about volume of patient recruitment due to a change in the way that consultations were arranged. When this study was planned, community pharmacists anticipated conducting appointment-based consultations, particularly for MURs. However, when data collection began, the pharmacists had realised that most consultations were conducted opportunistically and these did not meet the inclusion criteria for the study. The lack of success of appointment based consultations has also been found in a Dutch study (Kooy, Dessing et al. 2007). Despite this, two community pharmacists felt that there would be no problem in arranging appointments to meet the minimum of 5 patients required. The third pharmacist felt doubtful that this would be achieved but was happy to try. It transpired that only one of the original community pharmacists could recruit any patients. One community pharmacist recruited four patients, the other two did not recruit any patients.

Initially, contact with all pharmacists was by email and telephone to track progress in recruitment. As time progressed, response from pharmacists who were not recruiting diminished and in order not to pressure the pharmacists, contact was switched to letters. As the data collection period was nearing the proposed end point, it became clear that in order to reach the proposed patient numbers it would be necessary to recruit additional pharmacists. Due to the enthusiasm of the original pharmacists it was not thought that this would be difficult. Some of the original pharmacists referred colleagues to the study and others were identified by colleagues of the researcher. A further six pharmacists, including three working in primary care roles, were approached and three consented to participate. Reasons given for non-participation were primarily due to time constraints.

In order to maximise the potential for recruiting patients, an announcement was made at a local RPSGB branch meeting. Two pharmacists responded to the announcement but neither was able to be recruited to the study. A second announcement was made at a local Centre for Postgraduate Pharmacy Education (CPPE) evening workshop event but no pharmacists responded to the announcement.

All three pharmacists recruited in this second wave were initially enthusiastic about recruiting patients, however, one pharmacist was not able to recruit, and the remaining two pharmacists recruited only one patient each. The process of recruiting pharmacists to the study is summarised in Figure 3.1 below.

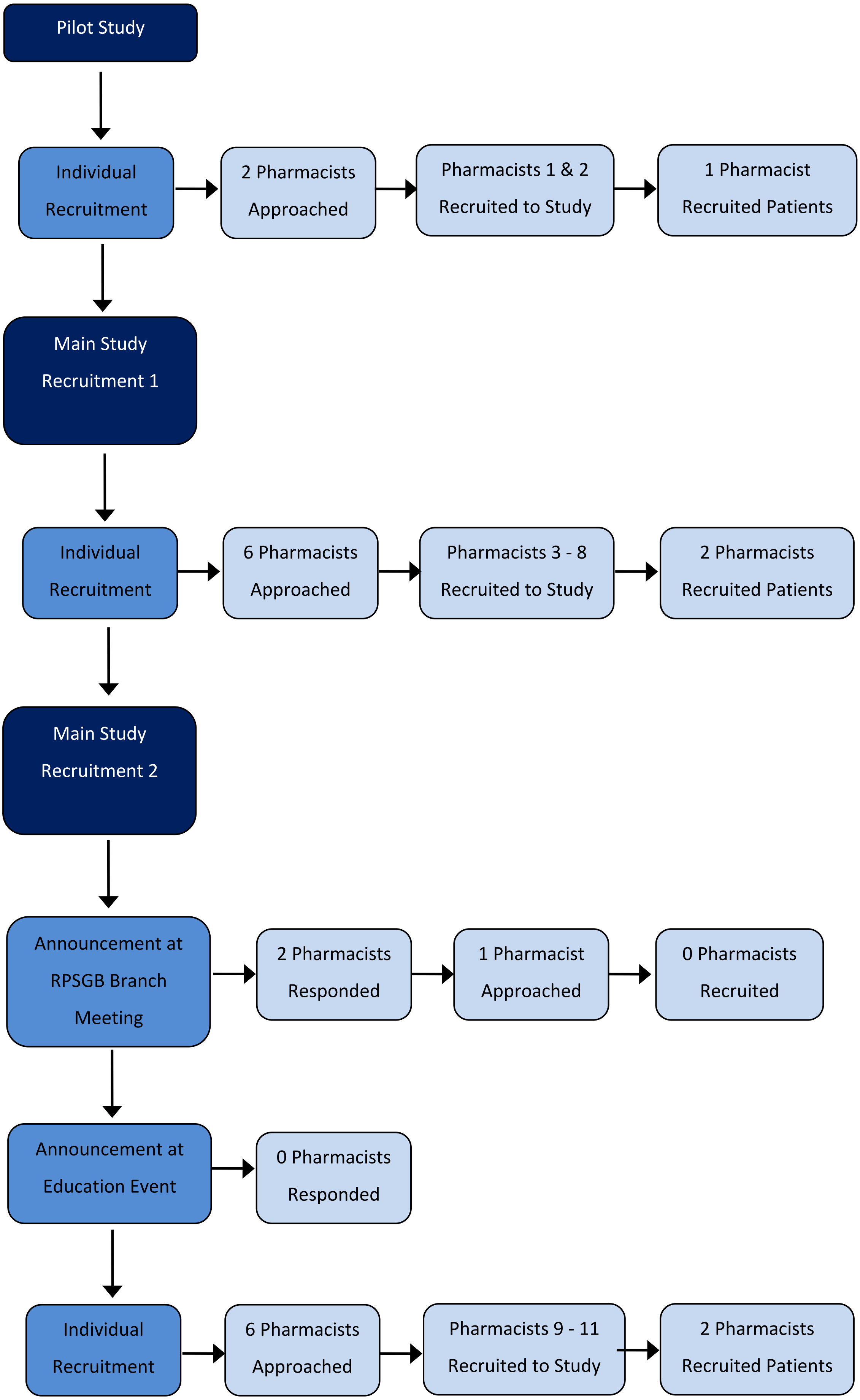

Figure 3.1 Flow Diagram of Pharmacist Recruitment

A total of eleven pharmacists were recruited to the study, including the two recruited for the pilot study. Five of these pharmacists recruited a total of eighteen patients. The details of the sample recruited can be seen in Table 3.1 below. It is important to note that only one consultation was initiated by a patient, the rest were at the request of the individual pharmacist or hospital clinic. Patient 18 requested an appointment with pharmacist 9 in primary care. This was a follow up appointment regarding blood pressure control. The initial appointment was due to a GP referral; the patient booked subsequent appointments with the pharmacist who managed her blood pressure medication.

Table 3.1 Detail of Sample Recruitment

Pharmacist	Sector of Practice	Consultation Type	Patients Recruited
1	Community	MUR	Pt 1
			Pt 2
2	Community	MUR	-
3	Community	MUR	-
4	Hospital	Anticoagulation	Pt 3
			Pt 4
			Pt 5
			Pt 6
			Pt 7
			Pt 8
			Pt 9
			Pt 10
			Pt 11
			Pt 12
5	Community	MUR	Pt 13
			Pt 14
			Pt 15
			Pt 16
6	Community	MUR	-
7	Hospital	HIV	-
8	Hospital	Pain	-
9	Primary Care	Unrestricted	Pt 17
10	Primary Care	Unrestricted	-
11	Community	MUR	Pt 18

Time restraints meant that recruitment efforts had to be stopped and analysis of the acquired data would be conducted despite not reaching the target sample size. Difficulties in involving pharmacists in research will be considered in chapter 7 during reflections on the study.

This chapter will now move on to describe in more detail the data collection process.

3.9 Data Collection

This section will first summarise the data collected during this study and will then consider the methods used in more detail.

A pilot study consisting of two pharmacists and two patients was conducted in order to test the methods chosen, give the researcher practise at utilising the methods and interview guides, and to ensure that the data collected would be appropriate to meet the aims of the study. The two patients recruited in the pilot study were both recruited from the same pharmacist in order to assess how easy recruitment of multiple patients would be. The pilot study was completed and the data collected was appropriate. No changes were made to the methods for the main study and consequently pilot data was retained and included in the main study.

A further nine pharmacists and sixteen patients were recruited to the main study as described in detail above. All interviews and observation of consultations were conducted by the researcher. All of the patients that were recruited and began the study completed all three sections of the patient participation and concluded their involvement. No patients withdrew from the study. All patients elected to have their interviews conducted at the location of their consultation i.e. the community pharmacy or hospital clinic.

A follow up letter was sent to all pharmacists who had not recruited patients to the study in order to establish what the barriers to recruitment were and to inform the design of any future research. A copy of this letter is included in appendix 6. Of the six pharmacists who did not recruit patients, four replied to the follow up letter and the responses will be considered in chapter 7 with further reflection on the study.

This section will now consider collection of the interview data.

Semi-structured interviews were conducted with both pharmacists and patients regarding communication. Four types of interview were conducted during this study:

- Pharmacist interview 1: An initial interview concerning communication in general, particularly pharmacists' opinions of communication training and the importance of good communication in practice. Pharmacists were also asked about the role of communication skills in pharmacy.
- Pharmacist interview 2: One concluding interview following completion of all patient consultations, to give the pharmacist an opportunity to reflect on the process and highlight anything from the study they felt was important.
- Patient interview 1: An initial interview prior to the consultation with the pharmacist. This interview discussed patients' prior experiences with pharmacists, their expectations and opinions of pharmacists and pharmacy services. In addition the interview explored the aims and expectations that the patient had of the consultation.
- Patient interview 2: One concluding interview with the patient following the consultation. This interview covered patient feelings of how the consultation went and if their expectations were met, as well as discussing in detail the communication skills that the pharmacist used within the consultation.

The research aimed to investigate the views and opinions of the participants and so loosely structured interview guides were developed with open questions and subject headings to guide the interview process rather than pre-defined or specific closed questions. Interview guides were checked by an experienced researcher to confirm face validity prior to commencement of data collection and the interview guides can be seen in appendix 7. One section of the interview guide for the second patient interview contained more structured prompts including certain closed questions or prompts for specific questions. This was in the area of discussing the pharmacists' communication skills during the consultation. Commenting on communication skills can be difficult for participants due to the slightly abstract nature of the topic, and that many people do not notice communication skills without prompting. The researcher was keen to avoid participants feeling awkward if they did not have particular thoughts on this topic and so use of the more detailed prompts allowed the participants more opportunity to comment. However, open questions and discussion were always attempted before moving on to a more structured approach.

The researcher allowed the participants to guide the interview and facilitated discussion of matters raised by the participants before returning to prompts on the interview guide. A selection of interviews were reviewed by experienced researchers to ensure that the researcher explored the participants' perspective and allowed the participant to lead the interview. The length of the interview and amount of information obtained was determined by the importance of the topic to the interviewee.

All interviews were audio-recorded and transcribed verbatim. Initial recordings were transcribed by the researcher in order to learn the skills of transcription and to undertake preliminary analysis that such familiarisation with the data allows. However, due to physical impairment, an approved transcriber was employed to transcribe the remaining recordings.

This section will now consider collection of the consultation data.

All pharmacist-patient consultations were audio-recorded and transcribed verbatim. As described above, this was conducted by the researcher and an approved transcriber. This allowed detailed analysis of the communication during the consultation without the use of proxy measures. It was also possible to relate analysis of data from the patient interviews directly to the relevant consultation transcript which added depth to the analysis. A digital voice recorder was used in all recordings and all files were moved directly to computer allowing password protection, and were removed from the recording device.

Observational notes were taken by the researcher during the pharmacist-patient consultation. The notes were intended to aid with contextualisation of the data and recorded behaviours of participants as they occurred. The notes were not structured and did not follow a protocol. A sketch was drawn of the layout of the room and position of those present for each consultation. Notes were then made concerning any relevant information about the pharmacist, the patient or the consultation, for example, if the computer system was broken leading to complications, or the clinic was running late or short-staffed. During the consultation itself, notes were made of any non-verbal communication of interest, or that would aid in interpretation of the consultation transcript. All notes were recorded by the researcher using participant reference numbers to ensure confidentiality. The observational notes were not directly analysed but used in the interpretation and contextualisation of the audio-recordings. In order to gain experience at recording data using non-participant observation, I attended a GP clinic session and recorded notes as intended in the pharmacist-patient consultations. This ensured that I was prepared to record the required information from the first consultation observed.

The final section of this chapter explores the analytical processes that were used during this study.

3.10 Analysis

Analysis of the data collected in this study followed two paths. The first is the thematic analysis of the interview and consultation transcripts. The second is the application of a communication skills assessment tool to the consultation transcripts. Each will now be explored in more detail.

3.10.1 Thematic Analysis

Thematic analysis was used to analyse the interview transcripts using the constant comparison method, following the principles of grounded theory discussed above. The qualitative computer software NVivo was used to facilitate analysis. Firstly, the transcripts were read while listening to the recording to fully familiarise the researcher with the data. Any observation notes were also revisited. Each transcript was then read and any ideas, or topics in the data were identified and categorised as individual codes. As more transcripts were analysed, relationships between the codes were explored and the codes were arranged into themes. Previously coded data was compared to check that assignment of data to specific themes was correct. This continued until all transcripts had been analysed and the coding compared until no new themes emerged. The data analysis stopped short of generating new theories as data collection stopped before saturation was reached. The number of interviews was limited by recruitment and so the researcher cannot be certain that further interviews would not have elicited new themes but no new themes were found during analysis of the final interviews which suggests that a point of saturation was approaching.

Analysis of the consultation data followed two paths. Firstly the consultations were read through in conjunction with listening to the recording and familiarisation with the observational notes. An initial process of thematic analysis was undertaken, as above, to draw out any emergent data from the transcripts. Again the qualitative computer software NVivo was used to facilitate analysis. The coding framework for the pharmacist and patients interviews and the consultations can be seen in appendix 8 and a sample of a coded transcript is given in appendix 9.

Secondly, the consultation transcripts were analysed utilising a communication skills assessment tool. The choice of assessment tool and its application to the data will be discussed in the next section.

3.10.2 Choice of Tool for Assessing Communication

A great number of tools have been developed to assess communication skills in healthcare communication and a number of these were reviewed in chapter 2. In this section I will explain the choice of communication assessment tool based on consideration of four published tools and the application of the selected tool to the data. The majority of tools developed to assess communication in healthcare are designed for use in medical consultations; the four tools described here were selected for consideration because they are, or have previously been, linked to pharmacy specific communication.

Firstly, an instrument proposed by Hargie and Morrow in 2000 was considered (Hargie, Morrow et al. 2000). The authors present a list of the constituents of effective communication as defined by community pharmacists. Whilst not designed specifically for use in assessment of communication skills, the list was compiled by pharmacists and so should represent the skills that professionals consider important in their own consultations. When assessing consultations, it would be interesting to see whether pharmacists utilised the skills that their fellow professionals felt defined good communication. However, it would be difficult to use this list of skills as a basis for assessing communication skills due to the lack of explicit detail within some of the points, and their often imprecise nature. In addition the list is grouped into sections defined by the participant pharmacists rather than according to the process of a consultation which may make application as a tool more difficult. Finally the list is not supported by an evidence base to reinforce the inclusion of the skills of the lists and therefore was not selected for analysis of the consultations in this study.

The remaining three tools to be considered were designed for assessing communication in medical consultations. Their design as tools makes them a good choice for consideration for this study. Two of these are validated instruments which have been assessed for their applicability to pharmacist-patient consultations (Greenwood, Howe et al. 2006) which increases their suitability for this study. The authors felt that both tools were easily applied to pharmacy and would be useful in future research of pharmacist communication. The first tool to be considered is the Henbest and Stewart tool to assess patient-centredness in a consultation (Henbest and Stewart 1989). In using this tool the researcher records each patient ‘offering’ of information, and rates the practitioner’s response, from 0-3, according to how patient centred it is. Whilst this is a useful tool, it is not the aim of this research to solely assess the patient-centredness of a consultation. Therefore I am not using this tool as it would only assess this one aspect of communication. This view is supported by Greenwood et al who use the tool in conjunction with an additional communication assessment tool – the SEGUE framework.

It has been reported that the SEGUE framework is the most widely used tool for communication skills teaching and assessment in North America (Greenwood, Howe et al. 2006). The framework was published in 2001 and lists 32 communication skills that underpin a good medical consultation (Makoul 2001). Researchers assess consultations according to a yes/no rating scale for the presence of each skill. The 32 points listed are precise with supporting information to assist the researcher, for example, ‘give patient opportunity to talk (don’t interrupt)’. The tool is presented as multi-use for application in teaching, assessment and in research. This would enable use of a single tool throughout the learning process, providing familiarity for students and teachers and would help to make research relevant to practitioners. Greenwood et al suggest that the SEGUE framework may have too many components making it complicated to apply during research but I feel that two key areas are missing from this framework which, therefore, make it less suitable for application to pharmacy consultations. Firstly, the framework has comparatively few skills devoted to information giving during a consultation and many pharmacist-led consultations are based around the provision of medication-related information. Therefore, the skills of information-giving may need a larger presence on a pharmacy-communication assessment tool. Secondly, the framework does not contain many skills for building relationships which are a key element of successful consultations. The SEGUE framework would provide a good tool to assess the consultations in this study but the limitations mentioned above mean that it has not been selected.

The final tool to be considered was the Calgary-Cambridge guide to the consultation (Kurtz and Silverman 1996). This instrument has been presented as a guide to defining communication skills curriculum and structuring the teaching of communication skills in medical education. The tool is widely used in medical schools in the UK and each skill is supported by an evidence base to reinforce teaching. However, the authors describe that the Calgary-Cambridge guide can be used in the assessment of communication skills in later publications (Kurtz, Silverman et al. 2005), where, as suggested above, a yes/no system can be used to determine if skills were appropriately displayed within the consultation. Due to the strong base of this tool in teaching, the authors stress the importance of providing comments with each rating to support learners. If used in a research capacity, these comments are not required since no feedback is given directly to participants. The Calgary-Cambridge tool provides a comprehensive list of 71 skills, with supporting descriptions, including emphasis on the skills of information giving and building relationships which were lacking in the SEGUE tool. Whilst not previously used in pharmacy based research, this tool has been used in the teaching of consultation skills to pharmacists and the authors report that the guide was used successfully to support learning (Cleland, Bailey et al. 2007). Use of this tool in research would enable development of the continuity described above and could help to make research accessible and meaningful to practitioners who have used the guide in training. This makes the Calgary-Cambridge guide a good choice for use in this study but further supporting the selection of this tool are the previous expert guidance and experience in the use of the tool that I have received. In 2008, I attended a four day intensive teaching course providing guidance on the use of the Calgary-Cambridge guides for teaching communication skills to health care professionals. The course was run by the authors of the guide at Cambridge University and provided extensive coverage of the principles underpinning the guide and its use in teaching. Since attending the course I have used the guide in teaching sessions for pharmacy academics, to demonstrate how the guide could be integrated into the pharmacy undergraduate degree at The University of Nottingham. My familiarity with the tool facilitated analysis of consultations and confirmed the selection of the Calgary-Cambridge guide for use in this study. A full copy of the guide used for analysis can be found in appendix 10.

Consultation transcripts were analysed utilising the Calgary-Cambridge guidelines for communication in the medical interview. Each transcript was coded to identify any instances showing utilisation of one of the skills contained in the Calgary-Cambridge Guide. The transcripts were assessed for each skill in turn, and the data coded according to the specific skill. Analysis explored the frequency of usage of each skill and the implications for pharmacist-patient communication. Any section of the transcript not showing the successful use of a skill was classified as ‘not-coded’. Within this category there were two types of data: data that demonstrated unsatisfactory use of a specific skill and data that did not relate to any specific skill within the guide. Data showing unsatisfactory use of skills were explored as above. The non-coded data not relating to any specific skills was explored thematically in order to establish what communication was occurring during these sections of the consultation.

An assessment of the suitability of applying the Calgary-Cambridge guidelines to pharmacist-patient consultations was then made by taking each of the skills in turn and linking their level of usage in the pharmacy consultation data reported in this study to the practicalities and intentions of pharmacy consultations and the related literature.

3.11 Dissemination of Findings

This research was undertaken with the intent of producing a thesis for submission for the award of a PhD, but in order for the findings of this study to inform future research and practice, it is important that the research is more widely disseminated. Reaching an audience of researchers within the academic community is important but targeting the wider health care community, including practitioners and teachers, will help this research to have a wider influence. Various aspects of this research have been reported as posters, presentations and published abstracts and a complete list can be found in appendix 11. I intend to produce papers for publication in peer-reviewed journals, and to disseminate findings to practising pharmacists, where possible, through avenues such as professional conferences and journals.

3.12 Summary

This study is a qualitative study based on the principles of grounded theory. The methods utilised were semi-structured interviews with the nine pharmacists and eighteen patients recruited, and observation and audio-recording of pharmacist-patient consultations. Each patient was interviewed before and after their consultation and non-participant observation was used to supplement the audio recordings and aid with contextualisation during analysis. All recordings were transcribed verbatim and thematic analysis was conducted on all transcripts. In addition, the consultation transcripts were analysed through application of the Calgary-Cambridge to consultations.

This thesis will now move on to present the data resulting from these investigations over the next three chapters. The first of these, chapter four, will present data from the pharmacist interviews.

Chapter 4.Pharmacist Interviews

4.1 Introduction

During this study eleven pharmacists were interviewed regarding their thoughts about communication in pharmacy. The interview guide included topics such as training, the importance of communication skills within pharmacy and use of communication skills. The interviews provided an opportunity for the pharmacists to talk about anything important to them that was related to communication skills. A number of themes emerged from the data, including communication with other healthcare professionals, communication of the profession to the public, and the role of communication skills in business, careers and the workplace. These themes are not discussed further within this thesis as the focus is the communication between pharmacists and patients within a clinic-style consultation. A summary of the demographics of the eleven pharmacists is shown in Table 4.1 below. Of these eleven pharmacists nine were white British and two were of Indian British background.

Pharmacists who recruited patients to the study were interviewed a second time following conclusion of their last patient consultation, at the end of their involvement. These second interviews were brief and provided an opportunity for pharmacists to reflect on their involvement in the study, and to raise any points that they felt were relevant to the consultations that were observed. The reflective content of these interviews is considered in chapter 7 in the context of reflection on the study as a whole.

This chapter presents data illustrating four key themes to emerge from analysis of the pharmacist interviews: the importance of communication skills, learning communication skills, the role of communication skills in pharmacy and influences on communication.

Table 4.1 Summary Demographics of Pharmacist Participants

Summary Demographics		Number of Pharmacists (n=11)
Sex	Male	8
	Female	3
Age (Years)	18 – 30	1
	31 – 40	5
	41 – 50	3
	51 – 60	2
	61 – 70	0
	70+	0
Area of Practice	Community	6
	Hospital	3
	Primary Care	2
Time in Current Position (Years)	0 – 1	0
	1 – 3	4
	3 – 5	3
	5 – 10	3
	10 – 15	0
	15 – 25	0
	25 +	1
Years Qualified	0 – 5	0
	5 – 10	3
	10 – 15	3
	15 – 25	3
	25 – 35	1
	35 – 45	1
	45 +	0

4.2 Importance of Communication Skills

During the initial interview, all pharmacists were asked their opinion regarding the importance of communication skills within pharmacy and in particular with relation to clinical skills. Every pharmacist interviewed thought that communication skills were important, although there was variation in the extent to which this belief was held. There was also a large range of reasons given to support the view of communication skills being important. Most pharmacists related the use of communication skills to interactions with patients but some included communication in a wider sense, including career or business implications of communication.

When considering the importance of communication skills in relation to clinical knowledge, all pharmacists felt that the clinical knowledge was essential in order to practise as a pharmacist. In addition, all of the pharmacists interviewed felt that communication skills were an integral part of their practice. Six of the eleven pharmacists interviewed valued communication skills more highly than clinical knowledge, as demonstrated by pharmacist five:

> *Ph5 (31 yrs qualified; community; male): Whenever students come and work with me.... I always tell them no matter what your degree is, the only thing that matters in community pharmacy is the communication skills, how you convey all that knowledge to the client that you are serving. And that's all that matters really and if you can foster that, that's probably the best thing you'll ever do.*

The sentiments of pharmacist five suggest that above all else communication skills are the key element required in order to be a successful community pharmacist. This pharmacist reported that his realisation of the importance of communication skills had happened over the last few years and that he had learnt through experience, the impact that good communication skills can have. Pharmacist five had been at his current place of work for more than 25 years and it is possible that this realisation has coincided with the expansion of the role of the community pharmacist and the introduction of new services which require more in-depth communication with the patient. It must be remembered that the pharmacists included in this study were selected because they conducted appointment based consultations with patients and were therefore already taking on these more advanced roles. This could mean that the pharmacists interviewed were more likely to highly value communication skills as they had chosen to provide services with a focus on patient consultations.

Four of the pharmacists viewed communication and clinical skills as equally important. It follows that one cannot transfer information without possessing both the knowledge and the ability to transfer that knowledge. This is a balanced view of the place of communication skills within pharmacy and being regarded as equal to one of the fundamental and underpinning aspects of pharmacy, the clinical knowledge, shows that pharmacists value good communication skills. The final pharmacist valued clinical knowledge above communication skills and explained that without the underpinning knowledge it would not be possible to practise as a pharmacist. The importance of communication skills for pharmacists, and other health care professionals, has been widely reported in the literature (Dickson and Rodowskas 1975; Morrow and Hargie 1986; Tindall, Beardsley et al. 1994; King, Schommer et al. 1998; Pronk, Blom et al. 2002; Silverman, Kurtz et al. 2005).

An interesting finding from this study is that whilst the pharmacists interviewed recognised the importance of communication skills, they also stated that they were not consciously aware of using these skills for most of the time. The data analysis shows that they became aware of communication skills only due to an incident occurring, for example a training course, an awkward discussion, or a conversation with senior staff. This reflects the reality of using communication skills in everyday life; people are not usually aware of the communication skills they are using unless a critical incident occurs. Pharmacist 11 reported that the discussion held as part of the interview process had made him more aware of how important communication skills are. This is a reminder of how the agenda of an interview can influence the way in which participants view the research topic.

During the initial pharmacist interview, six of the pharmacists specifically mentioned that they did not usually think about how to use their communication skills. It was reported that utilising the correct communication skills was now automatic or sub-conscious and pharmacists indicated that this had occurred over time and with practice.

Whilst it could be considered a negative that pharmacists are not thinking about communication skills as they use them, it is in fact suggestive that the pharmacists are able communicators without the need for constant reflection. For communication to be effective, it must be a two-way process, with the other participant providing continual feedback, intentional or otherwise, which enables the pharmacist to determine if the communication is successful. However, poor communicators may not pick up feedback cues and may feel their communication is successful when it may not be, therefore, care must be taken when interpreting personal perception of communication effectiveness. The pharmacist interview data suggest that pharmacists feel they are responsive to feedback and cues from patients regarding communication skills as illustrated by pharmacist 11:

> *Ph11 (24 yrs Qualified; community; male): Well I think it is second nature, I think I've become aware of it if something goes wrong. I think later I could have put that better, if I could have handled that in a better way, if I'd said this. That's when I become aware of my communication skills, when they've let me down.*

Pharmacists do not need to be aware of communication skills at all times as they need to focus on the content of the communication and not just the process. However, it is important that pharmacists are aware when their use of communication skills could be improved and that they are able to reflect, as pharmacist 11 states, on times they have been let down by their own skills. The data presented in chapter 6 explore the pharmacists' response to patient cues in the consultations recorded.

The data show that all pharmacists valued communication skills and overall viewed them to be one of the underpinning skills of a practising pharmacist. Taking account of the study focus on communication skills, there is still considerable regard for communication skills within this sample. A key finding from this study is the importance that practising pharmacists place on communication skills.

The data presented here suggest that the pharmacists involved in this study are confident about their own communication skills and are able to communicate effectively without conscious thought about which skills are employed in routine situations. Pharmacists feel able to respond when patient cues indicate that the communication needs improvement; however, this may not accurately reflect practice. The consultation data presented in chapter six will allow exploration of the pharmacists' use of communication skills in practice. The next section in this chapter will explore pharmacists' views about learning communication skills.

4.3 Learning Communication Skills

During the initial interview, pharmacists were asked about how and where they had learnt communication skills and there was a wide range of responses regarding the location, method and quality of any learning that had taken place. A major distinction was between formally taught learning, and experiential learning, i.e. that which occurs naturally from experiences throughout life.

This section will first look at different approaches to learning communication skills and will explore how pharmacists are able to utilise any new skills that they have learnt. This section will move on to examine whether the pharmacists interviewed feel that they require any additional training in communication skills, and if so, how they would like this to occur.

4.3.1 Approaches to Learning Communication Skills

All UK pharmacists must complete a four year undergraduate degree followed by a one year pre-registration work-based placement in order to qualify. In addition, there are many recognized post-qualification courses for pharmacists to undertake should they wish, for example clinical diplomas and prescribing qualifications and there are also a wealth of short courses and structured learning targeted directly at qualified pharmacists. This results in a vast number of opportunities for communication skills to be taught during either compulsory or additional training, and at different stages within the professional career of a pharmacist. Pharmacists also reported learning communication skills via informal experiential learning throughout their lives, both pre and post-qualification.

This section first explores whether pharmacists have received formal training during their undergraduate, pre-registration or post-qualification training. The place of experiential learning of communication skills will then be considered.

When asked about communication skills training at undergraduate level during the pharmacy degree, five of the eleven pharmacists could not recall having any dedicated training. The pharmacists were uncertain whether there was no such training, or whether they simply could not remember it as explained by pharmacist 9 below. The five pharmacists had been qualified for between 7 and 23 years, which spans much of the time over which communication skills training has been introduced into undergraduate curricula.

> *Ph9 (23 yrs qualified; primary care; male): I think my training in communication skills there (at university) was, was somewhere between abysmal and absent. And you know, we did lab experiments, we barely even did seminars where you felt you were contributing or being heard and our views weren't sought and communication, it was very one way..... Lord forbid that we should interact with each other or with our tutors or, or have any concept of working with groups.*

It is interesting that pharmacist 9 feels that communication skills should be fostered throughout the course and not in a single dedicated session, highlighting the need for experience in communicating in a wide range of situations and with a variety of people, thus building up both personal and professional skills in communication.

Other pharmacists remembered some communication skills training but did not find it useful for varying reasons. Three pharmacists reported that they were taught some theory of communication, but that all teaching was in a lecture style format with no opportunity for practising skills. Other pharmacists reported that opportunities for practising were available but were not combined with effective feedback, or alternatively required the student to focus on the content and process of the consultation within the same session which can be overwhelming for learners. The data suggest that pharmacists require both the knowledge underpinning communication and the opportunity to practise, combined with constructive feedback during dedicated teaching sessions. This is supported by current research in teaching communication skills to health care professionals (Maguire and Pitceathly 2002; Silverman, Kurtz et al. 2005).

Overall, the pharmacists in this study have reported that they feel they received little or no useful training in communication skills during their undergraduate pharmacy degree. This finding is supported by findings from 1992 which conclude that pharmacists leave university well equipped with the knowledge to educate patients, but not necessarily with the skills (Fisher 1992). It is important to note that the pharmacists' recollection of their undergraduate teaching may not be reliable or accurate but the pharmacists did not perceive their training to be useful.

During the pre-registration training year, pharmacy graduates spend time working in the pharmacy profession. This is an important opportunity for learning communication skills in a more realistic environment but without full responsibility for outcomes, as students act with the support and advice of a tutor. Often formal teaching sessions are run for groups of pre-registration students. Four of the pharmacists in this study reported that they had received dedicated training on at least some aspects of communication skills during their pre-registration year.

For pharmacist 10 the teaching was centred on what questions to ask in order to elicit the required information from the patient, including the use of mnemonics and protocols, but did not teach the skills to underpin gathering information from patients. Three pharmacists reported that they had received more detailed training in communication skills and this was reported in a positive way. The pharmacists felt they had really benefitted from such dedicated training, as described by pharmacist 4:

> *Ph4 (11yrs qualified; hospital; male): The pre-registration year there was quite a lot in that because it was like three or four day residential courses, where it was in smaller groups and you were, they filmed you, and you were people out, you know, handling complaints and a lot of that was around communication things and you'd do like outward bound exercises and it was how you interact with the group and people other people in the group were evaluating you and stuff like that.*

This quote shows that the training was much broader than just skills for an individual patient consultation. The data indicate that extended training made use of small group learning, peer group communication and expert knowledge to work on a range of both generic and specific communication skills. The pharmacists reported this training in quite a lot of detail which is in contrast to the reporting of undergraduate training. This suggests that the pharmacists remember considerably more about this training, which was only one year more recent for them, than the undergraduate degree. It could be that the communication skills training received during the pre-registration year was of higher quality, or that the pharmacy students were more receptive to communication skills teaching at this stage in their training as they were able to immediately see the application of the skills to practice.

There was considerable variation in the type and quantity of communication skills training accessed post-qualification by the pharmacists interviewed in this study. Pharmacists had access to courses run by their employer, or by external institutions; some were compulsory, some voluntary and the courses were for qualifications, continual professional development (CPD) or interest. Some communication training, often compulsory ‘in-house’ training, was approached from a business rather than a clinical perspective which provided support in management communication but did not develop the skills required for patient interaction.

Pharmacist 2 described training that he had received through a diploma course and a session run by a pharmaceutical company. He explains that communication skills teaching can be broad or specific:

> *Ph2 (16yrs qualified; community; male): There was elements of my diploma that sort of were around communication skills, yes I mean there was things like you know good models of care and concordance and all these types of businesses…. and I’ve just recently been on a course put on by one of the drug companies on influencing skills during consultation skills for concordance so to achieve concordance.*

The quote shows that communication can be taught as part of other courses, such as concordance, within a diploma qualification, or by focussing on a specific skill in an individual session.

Overall, very few pharmacists mentioned that they had attended any formal taught courses on communication skills at a post-graduate level, but the pharmacists reported that training is available. The small number of the study pharmacists accessing additional post-graduate training in communication may be due to their actual, or perceived, proficiency in communicating, or it could be that such courses are not promoted or easily available to pharmacists; for example, the CPPE does not run communication skills courses, and pharmacists may often need to source and fund pharmacist cover in order to attend training courses, when they are available.

Pharmacists reported that they also learnt communication skills as a continual process throughout everyday life and work. Seven pharmacists reported that they learnt about communication skills through experiences such as observing others, or critical incidents and four of those pharmacists valued such informal learning more highly than formal teaching, as shown by pharmacist 10 below. However, pharmacist 5 explained that this was due to a complete absence of formal training in communication skills.

> *Ph10 (10 yrs qualified; primary care; female): The best way to teach communication skills is to watch someone who is good at communicating. As much as you can read or as much as you can listen, there's nothing better than watching someone in action.*

Analysis shows that learning from others took two forms, firstly joint discussions of difficulties or useful strategies in communication, and secondly, observation of communication in practice. Pharmacist 7 described how a clinical interest group met to share joint experiences and help each other to manage difficult cases and described the value of experienced colleagues as resources.

> *Ph7 (7 yrs qualified; hospital; female): When we get together and chat about all our nightmare patients and all the things and you think, 'Mmm is there a different way of approaching it?' and you often find that somebody, you know, somebody somewhere else had the same problem and usually somebody somewhere has found a way round it. Because there's no point in reinventing the wheel is there and certainly there's someone out there who's doing the same thing, someone who's got lots and lots and lots of years experience and really they're very good resources.*

Pharmacists reported that they learnt from a range of people through observation, including junior and senior pharmacists, pharmacy technicians and other professionals including doctors and nurses. Pharmacists were able to observe techniques that worked well for other individuals and try to implement those skills in their own practice. They also reported that learning from situations where communication had not been successful for others, helped them to avoid making similar mistakes. Pharmacist 11 explains how observing others helped to improve his practice.

> *Ph11 (24 yrs Qualified; community; male): I think it's, a lot of it is to do with observing other people. Seeing other people do something well and thinking aah, that's useful, I'll remember that and the next time that a similar situation arises, putting that into practice. And the first time it may not go that well, it's a case of going back and thinking is that just because that doesn't suit my personality or is it because that person's been giving it that way for a long time, it's natural to them, I have to perfect it.*

Pharmacist 11 describes a key aspect of learning by observing others and that is reflection on personal practice. In order for someone to improve their skills in communication, or any other discipline, it is important to understand what skills they already possess, and which skills need to be learnt or improved. It is also important to make the learning of any new skills relevant to current practice and to check how well new skills are incorporated. Being able to assess the reasons behind the level of success of a new skill will enable the learner to find ways of improving. Research has shown that experienced community pharmacists are able to learn the skills of empathy both from observation of others and reflection on their own practice which supports the data shown here (Lonie 2006). However, research exploring learning of communication skills by GPs found that experiential learning alone was not enough to improve skills (Kramer, Dusman et al. 2004) and this reinforces the need for combined formal teaching with experiential learning.

Pharmacists also reported that they learnt communications skills in many other areas of their life and were able to draw on this experience to enhance their professional communication. Examples included training and experience during charity work, teaching experience and being captain of a sports team which all require the development and use of specific skills that can then be applied in a range of contexts.

Pharmacists reported that it was not always easy to implement new skills and training into practice, whether learnt through formal courses or informal experiential learning. The data show that the pharmacists felt the underpinning theory of communication skills was important, and that taught courses played a significant role in imparting this theory and knowledge of communication skills. Research has also shown that using theory in teaching communication skills to medicines counter assistants has been useful in eliciting behaviour change (Cleland, Francis et al. 2007; Watson, Cleland et al. 2007). However, the extract below demonstrates that pharmacists felt the ability to actually implement new skills into practice required additional learning through observation and experience.

> *Ph2 (16yrs qualified; community; male): You probably need a little bit to start off with of the theory and how to do it and things to think about ... I don't think that in its own right is going to achieve anything. You've got to go ahead and practice it, and it would be better if we could do them [consultations] with other people in there to give you some feedback after.*

Research exploring communication skills teaching for pharmacists has also found that pharmacists find theory and opportunities for practise useful but have difficulty in implementing new skills (Lilja, Larsson et al. 2000b; Cleland, Bailey et al. 2007). Other pharmacists agreed with this and felt that role-plays could not replicate actual consultations. Pharmacist 10 felt that no matter how good the training course, she rarely altered her practice in the long term, despite her best efforts.

> *Ph10 (10 yrs qualified; primary care; female): But I go to these course and I come out and I still do everything how I've always done it, which is terrible. But I do try, honestly.*

She explained that this was because she had been working as a pharmacist for ten years whilst communicating in her own way. Pharmacist 10 found that trying to change these habits was difficult, even after training courses.

Practising new skills in real patient consultations, with observation and personalised feedback, was considered to be the most beneficial way of successfully incorporating new skills and ensuring that they are used effectively.

The pharmacists interviewed in this study had accessed a range of formal courses teaching communication skills with variable perceptions of effectiveness. The data suggest that pharmacists more highly value the informal experiential learning that has occurred through both work and social interactions. However, the pharmacists report that formal training and supported experiential learning used in combination most effectively support the uptake of new skills into practice. This suggests that a grounding in communication skills theory, with opportunities to practice new skills in a teaching environment, followed up by observation and feedback of real consultations, could help pharmacists to improve their communication skills. Learning through a process of theory, practice and reflection has been to shown to improve learning of communication skills and supports the data shown here (Katajavuori, Valtonen et al. 2002; Maguire and Pitceathly 2002). Informal experiential learning remains an important opportunity for supplementing more formal training and ensuring that skills remain up to date.

4.3.2 Future Training Requirements

Only one of the pharmacists interviewed felt that they had received sufficient training in communication skills when they began conducting patient consultations. This was pharmacist 8 who had an unusual background due to completion of undergraduate medical training in addition to pharmacy education. He explained that there was a much greater focus on interaction with patients, and on communication skills training to support these interactions during his medical training, in comparison to his pharmacy training. The remaining pharmacists felt that some additional training during the early stages of their career would have been helpful but there was variety in the extent of training that the pharmacists felt was required. This is in contrast with earlier research which reports that pharmacists felt that they did not require additional training (Kirking 1982). The differences found may be due to the increased emphasis on patient counselling in pharmacists' roles today, or an increased awareness of the importance of communication skills. Five pharmacists reported that they had definitely not received enough training in communication skills, as demonstrated by pharmacist 7:

> *Ph7 (7 yrs qualified; hospital; female): We're thrown into the job with very little by way of erm, training, you know. On my first day I was asked to go and see a patient and I thought, I don't really know what I'm doing.*

This quote is typical of the responses explaining that newly qualified pharmacists, or those new to extended counselling, often feel unprepared for their roles. Pharmacist 9 reported that he felt communication skills were often not considered part of training by employers once pharmacists are qualified and that he was expected to 'just cope'. This has resulted in periods of discomfort and adaptation later in his career than he felt was reasonable, due to a lack of underpinning communication skills training at the start of his career.

Pharmacist 5 considered the impact of extended counselling based services now provided by community pharmacists on the profession as whole and the importance of communication skills training when he was asked about whether training was sufficient:

> *Ph5 (31 yrs qualified; community; male): No, again definitely not. Er, the whole role has just been put on to pharmacy without much thought into the communication side of it. Erm, I don't know whether this was the fault of our negotiating bodies or the unwillingness of Pharmacists to partake in such things, I'm not quite sure but whatever the case it needs to be done and it needs to be done asap. If nothing, if just for the sake of Pharmacist, just get them up to speed also, just to make them a bit more confident of their abilities.*

Pharmacist 5 identifies that additional training in communication skills needs to be in place to support the expansion of services provided by pharmacists. Pharmacist 10 explains that general training in communication skills would be useful for newly qualified pharmacists:

> *Ph10 (10 yrs qualified; primary care; female): I think for a newly qualified Pharmacist probably yes because wherever you work, whether it's community, hospital or PCT, within a pharmacy you've got to talk to GPs, you've got to talk to patients and carers and, and everyone having a course would be I think very useful, especially because you're so fresh out of university.*

Pharmacist 4 felt that he did not require any additional training because he was now so experienced in his current role that the communication skills he needed had become second nature and he was confident in using them. The data presented above show that most of the pharmacists interviewed did not feel they had received sufficient training but when asked whether additional training would now be useful to them, eight pharmacists felt that lower intensity, specific and targeted training could be useful for themselves or others at a similar stage in their career but that more involved general communication skills training would not be well received. Some of the specific skills that the pharmacists felt would be useful in additional training for consultation based roles are:

- Motivational or influencing skills
- How to structure consultations, including opening and closing skills
- Leading the consultation and keeping to time
- Confidence and assertiveness training
- How to deal with difficult situations.

The skills of structuring a consultation were also found to be useful by pharmacists undergoing supplementary prescribing training (Cleland, Bailey et al. 2007) whilst opening and closing consultations have been reported in Sweden as skills in need of development (Lindhe Soderlund and Milsen 2009).

Three pharmacists explained that they felt that underlying communication skills are the same in every interaction and are just applied differently to suit the context, as shown by pharmacist 8 below:

> *Ph8 (15 yrs qualified; hospital; male): It is something that is continually being regularly reinforced, maybe in a slightly different setting but the principles are exactly the same and it's probably a useful reminder every few years to do something. But it probably doesn't need to be too long.*

He explains that due to the common nature of the principles of communication, a short refresher course in communication may only be required every few years. Pharmacist 7 supported this by saying that some training in advanced techniques may be useful but 'patient skills' should already be present from earlier training. The time required for training was mentioned as a potential barrier, as indicated above, but Pharmacist 5 went further to suggest possible time limits that he would consider for communications skills training for some of the new roles that he was taking on, as shown here for nicotine replacement therapy (NRT) counselling and MURs:

> *Ph5 (31 yrs qualified; community; male): I'd be interested in provided it's not going to be long winded and, now NRT obviously 15 minutes, half an hour is the maximum I would look at. MURs I think you're looking at doing half a day's training as to how you communicate different client groups etc, etc.*

These short times would not be sufficient to incorporate the style of teaching that the pharmacists have previously reported as important to incorporating new skills, for example role-play, observation and personalised feedback. This may be because pharmacist 5 feels that he has already developed the core skills that he needs, and again feels that in depth training is more appropriate for newly qualified pharmacists.

The pharmacists interviewed felt that they had not received sufficient training to be able to confidently conduct patient consultations by the time they were first required to conduct them. However, these same pharmacists did not feel that they would now benefit from general training in communication skills. This suggests that as pharmacists progress through their careers, they become more confident in their ability to communicate and may have improved their skills through informal learning. Specific and targeted training in communication skills would appeal to the pharmacists interviewed in this study.

4.4 Role of Communication Skills in Pharmacy

Communication skills have wide reaching influences on many aspects of pharmacy. The single extract from Pharmacist 10 below begins to show some of these areas.

> *Ph10 (10 yrs qualified; primary care; female): To get the communication across or to get communication from the patient you need that first five minutes to get to know each other, the barriers to come down.*

Looking at each section of this quote, the first theme indicated is ‘to get the communication across’. This was the most commonly given reason for the importance of communication skills; transfer of information and knowledge to the patient was seen as a key role of the pharmacist. Secondly, ‘to get communication from the patient’ suggests that good communication skills from the patient are important but that it is essential that pharmacists have the necessary skills to facilitate provision of the required information by the patient. Thirdly, ‘to get to know each other’, the building of relationships and trust was seen as a key element in pharmacy, in order for ‘the barriers to come down’ and facilitate two-way communication. Each of these themes, and others relating to the role of communication skills in pharmacy, will be explored in greater depth in the following section. Finally, Pharmacist 10 also mentions time in this extract and the influence of time on communication will be covered later in this chapter.

This section will first explore the role of communication skills in information transfer and patient understanding and will move on to consider relationships, trust and empathy. Finally, the role of communication skills in facilitating patient communication will be explored.

4.4.1 Information Transfer and Patient Understanding

The primary reason reported for the importance of communication skills was the transfer of information to the patient and ensuring that the patient understands this information. This was reported by ten of the eleven pharmacists who were interviewed. Data presented in chapter 5 show that patients also value the information and advice that they receive from pharmacists which suggests that pharmacists have identified an area important to both participants.

Pharmacists said that giving information alone was not enough and stressed that it must be done in a way that enables the patient to understand the information. Some pharmacists took the concept of patient understanding further by wanting to ensure that not only has the patient understood the information, but that they have benefitted from the interaction with their pharmacist. The benefit that pharmacists were hoping to achieve was varied and included ensuring that patients ‘take their medicines safely' or to put their patients' 'mind at rest' with regard to their treatment. The pharmacists felt that communication was essential in order to achieve these benefits, based around the safe and appropriate use of medicines, coupled with patient knowledge about their own health conditions and treatment.

Pharmacists presented a range of methods for helping to understand information, including breaking explanations down into small chunks, checking patient understanding during the consultation, helping patients to understand information from other sources and tailoring the consultation to the individual patient. The literature supports the importance of checking patient understanding during consultations (Stevenson, Cox et al. 2004) but has found that pharmacists do not routinely and effectively check patient understanding (Deschamps, Dyck et al. 2003; Doucette and Andersen 2005). Studies reporting that pharmacists actively check for patient understanding are rare but suggest that where this is achieved, patient understanding is significantly increased (Watermeyer and Penn 2009).

Pharmacist 4 reported that establishing the patient's background knowledge is essential in helping patients to understand what their medication is and why they are taking it, as shown in the following quote:

> *Ph4 (11yrs qualified; hospital; male): A lot of patients if they don't really understand what it is then, or the reason they're say being started on warfarin then a lot of them will maybe just refuse or they get something in their own mind and they won't comply.....So you need to be able to like, to communicate your ideas across and it does, this is one of the things that we do with patients in clinic, the first thing we ask them is, 'What have you been told? What's the reason that you've been started on it?' to see who's told them before we actually see them, what information they've had.*

He feels this is particularly important in the warfarin clinic where he works due to public knowledge of the use of warfarin as a rat poison which can lead to patient concerns. Good communication skills are vital to pharmacist 4 both in assessing the patient's viewpoint and to alleviate any worries or concerns that the patient has by helping them to understand their treatment. The importance of establishing the patient's starting point has been incorporated in communication skills training for healthcare professionals which supports the importance of this skill (Silverman, Kurtz et al. 2005).

Pharmacist 1 is focused on ensuring that his patients understand how to use their medication. In the extract below he expresses a willingness to spend as much time as is needed with each individual, to check and make sure that they understand their medicines and receive maximum benefit from them.

> *Ph1 (38 yrs qualified; community; male): I always try and check when I've given a patient advice on using something that they actually know what they're doing with the product when they take away as it's no use actually giving them something and them using it wrong. It's the same when I do the MURs and especially in the asthma checks that I make sure that they do their inhaler technique correctly and I will not let them leave this room until they can do it, even if it takes a full hour.*

It has been reported that patients prefer to 'tell-back' their understanding of the information given, rather than to simply be asked whether they understand (Kemp, Floyd et al. 2008). This supports pharmacist 1's use of patient demonstration to assess understanding. Only pharmacist 1 specifically mentioned checking that patients understand during a consultation, despite a commitment from the eleven pharmacists described in this section to the importance of imparting information and making sure that patients understand. This is reflected both in the literature (Doucette and Andersen 2005) and in the consultation data analysis presented in chapter 6, where a low level of checking patient understanding was found.

Pharmacists 5 and 9 mentioned the role of a pharmacist as an interpreter of information. This included helping patients to understand information that they may have gained from other sources, such as friends and family or the internet. Here pharmacist 5 describes this role of helping the patient to interpret information.

> *Ph5 (31 yrs qualified; community; male): Now everybody goes on the internet they all, they all know about medicines. Where the Pharmacist comes in very handy is to help them to rationalize all the information they've got and this is what I consider the most important part of my job.*

Pharmacist 5 felt that this was an increasing role due to the increased availability of health related information to patients and is crucial if patients are to become more responsible for their own health care. Helping patients to gather and understand information outside of the consultation has also been reported in the medical literature (Jones, Hampshire et al. 2001; Sommerhalder, Abraham et al. 2009).

The final method that the pharmacists reported using in transferring information and helping patients to understand is that of tailoring the interaction to the individual patient. This was a significant theme to emerge from the data as all eleven pharmacists talked about using communication skills to vary their interaction with others. The pharmacists reported altering a range of factors to tailor the communication within an interaction to suit each patient, including the complexity of the language used, matching both the patient's ability to understand and how much information they want to receive, and the tone of the consultation, for example jovial, supportive or friendly. Pharmacists described tailoring the manner, tone, atmosphere or style of the consultation to reflect how they adapted their consultations. The purpose of tailoring a consultation was to help patients to receive the best treatment as described by pharmacist 5:

> *Ph5 (31 yrs qualified; community; male): I try and tailor it well, er given the information I have in front of me. Given how much I might know the person, given their personality and then of course you just take it from then onwards. The bottom line here is basically you've got information to impart, your job is to make sure that they take their medicines in a safe*

> *way and they, they get the benefit, most benefit out of the medicine. How do you do that? And you've just got to tailor the advice accordingly.*

Pharmacist 5 explains the factors that influence his assessment of the level of information to provide. Research has also shown that pharmacists make assumptions of the level of information that the patient requires based on their assessment of the patient's needs. The authors report that additional training may be required to support this task (Lilja, Larsson et al. 2000a). More recent research examining pharmacy students' perceptions indicate that the students misinterpret customer silence (Lilja, Volmer et al. 2008). By using prior relationships with the patient, pharmacist 5 may be able to more accurately assess the patient's requirements. Not all pharmacists felt that tailoring every aspect of the information was important in order to achieve the patient understanding that they were aiming for. Pharmacist 9 reported that he would welcome mnemonics to help structure consultations and in this way he could be confident that all patients would be given the information that they needed and no important points would be missed. He felt this would be helpful due to the variety of consultations he conducted and a need to stay on top of so many different areas. He did however stress the importance of using mnemonics as a guide and responding to the individual patient throughout the consultation. Pharmacists 4 and 6 both explain that due to the repetitive nature of many pharmacist-patient interactions, a lot of the information to be given is repeated and can become second nature. Pharmacist 6 says that as you become more experienced as a pharmacist, you become more able to accurately and quickly convey the information in a way that is easy to understand:

> *Ph6 (12 yrs qualified; community; male): So even though it's basically it's repetitive to you, it comes down to that checklist for every product to make sure it's safe to use.....if you're imparting the same advice you're going to use the same analogies a lot of the time aren't you?*

This extract supports data presented in chapter 6 which show that scripted text, such as repeated analogies, were used during the pharmacist-patient consultations recorded. Pharmacist 6 continues by saying that such structure should be used as a basis on which to build communication:

> *Ph6 (12 yrs qualified; community; male): It does depend on the person as well because what I try to do is make my advice understandable so make it relevant..... The underlying, meaning never changes but it's the delivery of it isn't it, the style and the delivery.*

The data suggest that pharmacists like to be certain of providing a comprehensive service to their patients and ensuring that all the required information is passed on to the patient. The use of repetition and guides such as mnemonics were reported to be helpful in achieving this. The literature shows that use of such guides are common in health care (Swinglehurst 2005) but that complications can arise if the format is too rigid (Fraser, Fraser et al. 2009; Jones 2009). Research has also reported that building routines into practice can help support regular tasks in order to focus on more complex issues (Greenhalgh 2008). However, in order to help each individual patient to understand the information, the pharmacists changed the delivery of their communication. The language, style, tone, manner and atmosphere of interactions were all descriptions used to express the tailoring of the delivery of the communication to each patient. Data presented in chapter 6 explores in more detail the methods that pharmacists' used in order to add structure to the consultations observed in this study.

The pharmacists reported the importance of giving information in a way that can be understood by patients but a Canadian study regarding the provision of side effect information to patients, suggests that pharmacists may be oversimplifying their information giving. The study advocates provision of more detailed numerical information so that patients are able to make an informed risk assessment. (Dyck, Deschamps et al. 2005). Further research would be required to establish the level of detail that patients require in explanations from their pharmacist, to make sure that pharmacists are correctly pitching the information that they provide.

In summary, almost all of the pharmacists interviewed stated that good communication skills were important for the accurate transfer of information to patients and to enable patients to understand and learn from their consultation with the pharmacist. The pharmacists reported a number of ways of ensuring that patients understand the information provided to them, the most common of which was tailoring the interaction to the individual patient.

The next section of this chapter will explore the role of pharmacist-patient relationships on communication during consultations and the importance of such relationships in pharmacy.

4.4.2 Relationships, Trust and Empathy

The positive impact of practitioner-patient relationships on patient outcomes has been documented in the literature (Katajavuori, Valtonen et al. 2002; Lyra Jr, Rocha et al. 2007; Rantucci 2007) and was a key theme to emerge from the data in this study. The benefit of building up a relationship with patients was discussed by six of the eleven pharmacists that were interviewed. All six of the pharmacists felt that building relationships was beneficial to pharmacist-patient communication and the aspects of trust and empathy were specifically mentioned as valuable in building a good relationship.

Pharmacists 5 and 6 reported that knowing a patient well facilitated communication as it was easier to communicate in a style that suits the individual patient, for example supportive, humorous or friendly. When the pharmacist had built up a strong relationship with a patient, they explained that choosing the correct communication style became second nature, allowing more focus to be placed on the subject of the interaction and ensuring that clinical information was correct. Pharmacist 1 explained the direct benefits to a consultation that good relationships can have:

> *Ph1 (38 yrs qualified; community; male): I think its nice to get to know your patients and to know the problems and to get, if you spend time with someone they'll be more open with you.... they'll be more honest with you.*

Pharmacist 1 explained that having a good relationship with a patient made it easier for them to talk about their health. This was also reported by the patients interviewed in this study and the patient data is explored in chapter 5. Pharmacist 1 went on to explain that being on first name terms with a patient before a consultation 'goes a long way' in making sure that the consultation is successful. He felt that working in the same village pharmacy for 10 years enabled him to build good relationships and to be on first name terms with the vast majority of his patients, resulting in a friendly and welcoming atmosphere.

Pharmacist 8 reported that a previous relationship with a patient was important in ensuring continuity of care and the smooth running of consultations. He explained that seeing new patients required familiarisation with the patient's history which could take valuable time from the consultation.

> *Ph8 (15 yrs qualified; hospital; male): A patient that you don't know, you need to know more background and within a clinic setting you don't have long to be able to assimilate what has gone on maybe over several years. Erm, and you certainly haven't got the chance to remember, 'Oh this has been tried, this hasn't been tried' and work formulating a plan or a proposed plan in your mind before actually seeing the patient. Whereas if it's somebody you do know then you know, 'Oh we've tried x, y and z' and you know roughly where you're leaning to and moving towards.*

Patients also valued the continuity of care that building a relationship with the pharmacist could produce and this is explored in chapter 5.

As mentioned previously, one element of relationships that pharmacists valued was that of trust. Pharmacists 2 and 5 felt that building trust could take time but that it was worthwhile and Pharmacist 5 described that building trust enabled him to better help his patients:

> *Ph5 (31 yrs qualified; community; male): It's not always easy you see, so you've got to know your clients and the only way you'll know your clients is to keep on talking to them.... once they build up a trust in you and they have told you some very intimate things and the only time they'll tell you intimate things is if they trust you, and to engender that trust obviously you've got to be communicating with them for a long, long time.... so yes the more you know about the person the better you can help them.*

This extract shows that pharmacist 5 feels that trust is important in helping patients to feel comfortable talking about intimate matters and this particular issue was again raised by the patients interviewed for this study. He explains that building relationships over time can help to build trust, allow open communication and enable the pharmacist to provide a better service to his patients. Pharmacist 2 felt that the time required to build relationships and trust made it difficult for locum pharmacists who often worked in different branches every day. He explained that working in the same place, particularly where patients knew the pharmacist by name, enabled trust to develop and this made patients feel more able to ask for advice.

The importance of empathy within pharmacist-patient relationships was raised by two of the eleven pharmacists interviewed but they felt that it strongly affected the quality of the relationship which is supported by published research (Lilja, Larsson et al. 2000b). This is shown by pharmacist 6 in the extract below:

> *Ph6 (12 yrs qualified; community; male): So that to me is one of the most important bits in here as well, it's communicating that you care and if you can communicate that, you don't have to say, 'Oh yeah we care'. But by listening and I suppose showing communication skills that you are actually listening, so open postures and the likes......But that's, to me that's very important to communicate, that you actually genuinely care about your patients. It's not always apparent.*

Pharmacist 6 explains that using communication skills carefully enabled him to express empathy and let the patient know that their comments were valued. Displaying empathy when interacting with patients has also been linked to better health outcomes (Tindall, Beardsley et al. 1994). Pharmacist 1 supports this and feels that the caring role is essential to the role of a pharmacist but he believes that younger pharmacists are not as caring as those pharmacists in his generation.

> *Ph1 (38 yrs qualified; community; male): I think younger, the younger pharmacists that are coming through now are not, how can I put it, they're not probably, well they're not as caring, as they were in my day. I mean in my time we were actually taught to be more I think more caring. I don't think that comes through now in any of the courses at the universities.... there's nothing down to actually dealing with people, you know, how do you deal with people in certain situations? Do you care, how do you care for people? And until we get back to being a caring society.... yeah, people haven't time for people.*

For pharmacist 1, pharmacy is a caring profession and it is essential to maintain this important aspect in the pharmacist-patient relationship by showing empathy in pharmacist-patient interactions.

The pharmacists reported that building relationships and trust with patients helped to provide the highest quality care by enabling patients to feel comfortable talking to the pharmacist and creating continuity in patient care. Data supporting these findings was found in the patient interviews and is presented in chapter 5. The importance of empathy within pharmacist-patient interactions was also reported.

4.4.3 Patient Communication

The third theme to emerge from the data regarding the role of communication skills within pharmacist-patient interactions was that of facilitating patient communication. Four pharmacists talked about how patient communication can affect consultations and the ways in which pharmacist communication can in turn impact upon patient communication. Pharmacists 5 and 9 reported that making the patient feel comfortable and able to talk easily during a consultation was an important function of their own communication, as described by pharmacist 5:

> *Ph5 (31 yrs qualified; community; male): The difference between a good Pharmacist and a bad Pharmacist is, if you can talk to your clients in a manner which makes them feel that yes they can give you the information that you need, that's it, that's all you need to help them.*

This quote shows how strongly pharmacist 5 feels about facilitating patient communication, particularly linked to gathering all of the information required to help the patient by stating that this makes the difference between a good and bad pharmacist. Pharmacist 10 felt that the first five minutes within a consultation were required to remove any barriers that might prevent a patient from feeling able to communicate. She reported that building rapport was often the skill she used to help patients to communicate more easily. Pharmacist 2 reported that in order to help patients to participate in interactions with the pharmacist, they must become used to talking to their pharmacist and asking for advice.

> *Ph2 (16yrs qualified; community; male): I get difficulty you know talking to patients in branches where obviously the pharmacist isn't very communicative... you go out and sort of try to counsel them on their medicines and they look at you as if you're from another planet because they're not used to getting any information about their medicines from the pharmacist yet other branches you can go out and can do it quite easily where it's done regularly......patient conditioning to what they expect.*

Pharmacist 2 explained that routinely engaging patients in prescription counselling helps patients to be more open to communication. The idea of patient expectations of communication was also raised by pharmacist 9, who reported that it is helpful if patients are 'coached' into conducting routine repeat consultations quickly and efficiently as they learn what information will be requested each time, for example in routine monitoring of long term medications. This influence on patients' communication is more prescriptive and is driven by the time pressures facing most health care professionals but may not encourage the patient to contribute their own ideas to the consultation.

In contrast, during consultations that are not for regular monitoring, pharmacist 9 discussed the importance of helping patients to form their own agenda for a consultation and to decide what they want to communicate during the interaction so that they can achieve their aims during the time available:

> *Ph9 (23 yrs qualified; primary care; male): you've got to encourage them to sort their own thoughts and, you know, communicate with them to get them to think about how they're communicating with you and erm, you know, using your time well, make sure the patients use your time well.*

This extract suggests that the pharmacist is encouraging patients to actively think about their own communication, but is trying to support them in this process. He reports that it is however rare for patients to attend consultations with an agenda of their own. This has also been reported in studies of genetic counselling which found that patients often lacked the willingness or knowledge to set their own agenda and were uncertain which topics were relevant to discuss during consultations (Pilnick 2002). Pharmacist 2 had experienced more patients bringing their own agenda to consultations and felt that the context of the interaction, in addition to pharmacist communication, affected patient communication, including setting an agenda. Research studying doctor-patient interactions has also found setting an agenda for a consultation and preparing questions in advance is highly valued by both doctors and patients (Cegala, Gade et al. 2004) but that patient agendas are often not well explored (Britten, Stevenson et al. 2000). In the extract below pharmacist 2 is discussing his thoughts relating to patients who attend consultations with their own agenda:

> *Ph2 (16yrs qualified; community; male): When I was bringing people in by appointment they'd had time to go home think of all their questions, get all their medicines, get*

> *themselves set and coming in for the appointment and want to talk in depth about their medicines and that was taking a long time, not through me keeping them there just that they want to talk about it which is good, but it aint 25 quid a service.*

This extract suggests that some pharmacists may be driven by the financial aspect of service provision rather than solely providing the best service for the patient. In community pharmacy, pharmacists are paid £25 for each MUR conducted. This method of paying pharmacists for specific services in addition to medicines dispensed, has led pharmacists to be more aware of providing value for money in service provision. Financial implications on consultations will be explored in more detail later in this chapter. Pharmacist 2 had previously discussed the importance of helping patients to communicate and encouraging them to ask questions and seek advice from their community pharmacist and he values building relationships with patients. However, the data suggest that a community pharmacist must consider the economic implications of conducting consultations, such as MURs, and the business aspects of community pharmacy. It is encouraging that he reports that patients are attending consultations with their own agendas and prepared questions as this suggests that they are taking responsibility for their role in such consultations, as encouraged by pharmacist 9 above. The data presented in chapter 6 show that only two of the eighteen patients recruited to this study prepared questions in advance and all consultations were appointment based. It could be that pharmacist 2 perceived that his patients' questions were prepared in advance, when in fact the questions arose during the consultation, or that the small sample size of this study means that the data are not representative.

The pharmacists interviewed in this study felt that their own communication skills could positively influence the communication of their patients by creating an atmosphere conducive to patient participations, and by encouraging patients to set their own agenda for consultations. However, the data suggest that there are conflicting factors which influence pharmacist priorities for consultations, including time and cost.

The final data section of this chapter will present factors that influence the communication that occurs in pharmacist-patient interactions.

4.5 Influences on Communication Skills

Communication can be affected by a large number of factors and can be altered in various ways. Many aspects of communication are sub-consciously controlled in most contexts, with the result that communicators are often unaware of the changes that can occur. Changes in communication can be overt or subtle, short-lived or long-lasting, significant or unimportant and can steer interactions to a range of conclusions. During interviews the pharmacists reported a range of factors that affected their communication during interactions with patients and three of the most commonly discussed themes will be presented in this section. The influence of location on communication will be discussed first, followed by the personality and experience of the pharmacist, and finally the influence of resources.

4.5.1 Location

During interviews the pharmacists talked about a range of ways in which location can impact upon communication during pharmacist-patient interactions.

The first was the importance of privacy, which was discussed in relation to both hospital and community pharmacy. Pharmacist 4 stated that it was easier to talk to patients in a private clinic consulting room rather than on a ward due to the noise, distractions and importantly, the lack of privacy on the ward which he felt inhibited patients from asking questions. Pharmacists 1 and 5 reported that the provision of a private consultation area was essential in community pharmacy. Preserving confidentiality was reported as the most important single skill in a list of communication skills for consultations, defined by a study group of pharmacists (Hargie, Morrow et al. 2000). The use of a private area for consultations has been shown to have mixed influences on consultations. The use of consultations areas has been found to increase the frequency of advice given by pharmacists and the number of questions asked by patients (Harper, Harding et al. 1998) but in contrast shows no increase in the number of consultations (De Young 1996b). A private consultation area can also provide a quiet environment which research suggests is important, given that noisy consultation rooms have been reported as a barrier to building relationships (Lyra Jr, Rocha et al. 2007). Pharmacist 5 reported that he kept his interactions brief when discussions took place at the pharmacy counter, as you could never be sure who was listening, and he felt that consultations taking place in a private room often had more time for discussion. The longer length of consultations in private areas has been reported in the literature (De Young 1996b). Pharmacist 5 said that the topic of the discussion also influenced the communication and he would always take someone to the private consultation room if they wanted to discuss something personal and mentioned emergency hormonal contraception as an example. Pharmacist 1 reinforced the importance of consulting in private, as this provided patients with an opportunity to speak in confidence about personal matters. The importance of the provision of private consultation areas was also discussed by the patients in this study with mixed opinions; the data are presented in chapter 5.

Two other issues relating to consultation areas in community pharmacy were raised, the first was the difficulty in keeping to time. Pharmacist 3 explained that during consultations that took place at the counter both the pharmacist and patient were exposed to a range of cues that indicated the length of the interaction, for example, cues from other people, telephone calls, interruptions from staff or requests for advice from other patients, all indicate that the pharmacist is busy and may be required elsewhere and consequently limited the length of consultations. When counselling took place in a private consultation room, the patients were not exposed to such cues and pharmacist 3 found that it could be difficult to keep to time in such consultations.

The final issue related to the use of consultation areas to be reported was the issue of safety and was raised by pharmacist 1. He felt that both pharmacists and patients should be aware of the potential for litigation or accusations of actions that could occur due to the private and enclosed space. He suggested that CCTV or a window panel only visible to staff could help to protect both staff and patients. He gave an example of where the privacy of a consultation area contributed to a misunderstanding:

> *Ph1 (38 yrs qualified; community; male): I always remember this funny story when I was at (location) and there was this chap there, a pharmacist called (name) and he was actually superintendent pharmacist for (company) and he went over there to do a morning at (location) and a woman came in asking would he measure her for some stockings, so he said yes, so they put her in the back room, so (pharmacist) was busy with his dispensing so when he had a break he said ah I'll go and measure this lady now, so he went to the back room and they'd asked just to roll her stockings down and eh take her shoes off and when he went in there she was absolutely starkers, gave him the biggest shock ever.*

Pharmacist 1 gave an amusing anecdote to illustrate a potentially serious problem associated with the use of private consultation areas. The use of private consulting rooms is routine throughout healthcare but the open commercial nature of community pharmacies may result in an increased potential for safety related problems to arise.

Two pharmacists discussed the influence of consulting at a GP surgery on pharmacist-patient interactions. Pharmacist 10 reported that patients often found it difficult to understand her role when she conducted clinics in a GP consulting room as “it feels a bit weird to sit down in a doctor's room with a Pharmacist” and even returning patients frequently thought she was a doctor. Pharmacist 2 also reported a change in patient perception during interactions at a GP surgery as shown in the extract below:

> *Ph2 (16yrs qualified; community; male): I see a very, very different attitude towards me when I'm in the surgery as when I'm actually in the pharmacy. They'll do anything I say when I'm in the surgery, they just take it a lot of them, not everybody of course, but um they you know, they don't argue or anything like that really, where as a lot of them in pharmacy don't really want to take the time to listen to you.*

He explains that patients are more willing to take the time to discuss their treatment with him whilst attending a consultation at a GP surgery, and those patients were more accepting of his advice in this context. Pharmacist consultations occurring at a GP surgery may be confusing for patients as this is not a context where they would expect to find pharmacists normally. This may lead to confusion over the role of the pharmacist and patients may be inclined to respond as they would in a doctor-patient consultation. Again reports in the patient interviews show that the normal purpose of the consultation location can affect communication within a consultation. However, not all pharmacists felt that location was influential on pharmacist-patient communication and pharmacist 7 reported that it would be the same interaction, just in a different place and it would, therefore, not alter the basic communication skills to be used.

The data show that the location of a consultation can influence communication in a number of ways. Privacy was the most important aspect of location reported and pharmacists felt that patients were more comfortable and able to speak to the pharmacist in a private area. Caution of the use of private consultation areas in community pharmacy was raised due to the difficulty in keeping to time, and the possibility of safety concerns for both pharmacist and patient. Finally the influence of location on patient perception of the pharmacist was raised with regard to consultations conducted in GP surgeries.

The next section will explore the influence of a pharmacist's personality, experience and confidence on communication within pharmacist-patient consultations.

4.5.2 Personality, Experience and Confidence

Ten of the pharmacists interviewed spoke about the impact of personality on communication and seven of these ten felt that personality played an important role in determining the way in which pharmacists communicate with patients.

The pharmacists explained that, as mentioned earlier, a lot of communication is instinctive as the majority of communication occurs without considering the skills in use and it was reported that communication skills must be learnt throughout life in order for this to occur. The learning of communication skills through life experience was strongly linked to personality by the pharmacists interviewed. Four of the pharmacists discussed their feeling of ease during verbal communication and explained 'being able to talk to anyone', both whilst growing up and as a pharmacist. Some specific examples of experiences that fostered an outgoing personality were given, such as being sports team captain, or working in retail from a young age but others felt it was their natural personality. Pharmacist 3 explained that communication skills could be learnt, but that they must be incorporated into your personality in order to use them well. Pharmacist 6 felt that personality did influence the way in which he communicated but that this was not always important:

> *Ph6 (12 yrs qualified; community; male): I don't think it's important as such in terms of using the medicines safely, it's important if you want to drum up trade and increase business because people come, people will come in here for a chat.... but in terms of ensuring the medicines are used safely and effectively, as long as the information is imparted clearly and concisely then it doesn't really matter whether you have a laugh with a patient, a person, or a pharmacist or not or whether it's on a relaxed informal basis or not does it?*

This extract suggests that whilst personality does affect pharmacist communication, its influences are not always important. This was echoed by pharmacist 4 who explained that any member of the health care team could effectively provide information to patients; it was just the style of the consultation that changed to reflect the individual's personality. Pharmacist 4 and 6 still felt that good communication skills were essential in providing information to a patient, but that personality did not necessarily need to come through in all interactions.

Pharmacists 3, 7 and 8 felt that there was a balance of influences between personality and teaching on the way in which they communicated with patients, which pharmacist 7 described as the balance between nature and nurture:

> *Ph7 (7 yrs qualified; hospital; female): It's hard isn't it, because some people are naturally very good but most people even if they don't start off good can probably learn to be .... effective, even if it's not natural to them... you've only got to see somebody and think, 'Yes they've clearly just got that knack...And some people, you see them at the beginning and they're terrible but they can learn, we can all learn and get to some point where we're at least proficient... But I think all of us can benefit from some good training... It's a hard one isn't it? Nature and nurture, bit of both.*

Pharmacist 8 went on to explain that years of experience had more of an influence than personality as you progressed through your career. This was supported by pharmacist 6 who felt that communication skills and experience evolved together and learning through reflection on particular incidents, as discussed earlier, allowed the development of further communication skills. Pharmacist 2 also described the impact of experience but noted that personalities too change with age and this is accompanied by growing confidence in the skills and abilities that have been developed along the way.

Pharmacists 6 also felt that confidence in particular played an important role in influencing communication in pharmacist-patient interactions. He reported that as confidence during interactions increased, pharmacists were more able to utilise a range of communication skills, for example, using skills to provide extra thinking time without disrupting the flow of the conversation, or undermining patient confidence in the pharmacist's clinical knowledge. The quote below shows how important he felt confidence to be:

> *Ph6 (12 yrs qualified; community; male): in terms of communication one of the worst things you can communicate to the patient is that you're not very confident and you don't know what you're doing and that's something you do subconsciously..... Communicate it confidently, the medicine will work at least 20% better than if you don't communicate it confidently.*

Pharmacist 6 suggests that confidence can affect not only communication style, but ultimately, patient health outcomes due to the impact that belief in a treatment can have. The confidence of pharmacist communication also links back to the importance of trust that was discussed earlier in this chapter. If the pharmacist displays confidence in their communication, the patient is more able to trust the advice that is given. Trust was considered to be important to the patient's interviewed and the place of confidence in creating trust is discussed in chapter 5.

The pharmacists reported that personality, experience and confidence can all influence the way in which pharmacists communicate with patients. Personality was reported to influence the style of communication but was not felt to be essential in the accurate and effective advice giving role of a pharmacist. The pharmacists reported that gaining experience helped to facilitate the use of communication skills and personality became less important as use of those skills improved. Experience also engendered confidence in the pharmacists which was reported to influence both communication and patient outcomes.

The next section will consider the influence of time and money as resources on pharmacist-patient communication.

4.5.3 Resources

The final section of this chapter discusses the influence that resources have on pharmacist-patient communication as reported during the pharmacist interviews. The two most commonly mentioned resources were time and money. Seven pharmacists talked about the time pressures that they face during patient consultations and six felt that they did not have as much time as they would like. This resulted in cutting conversations short and, as pharmacist 9 explained, 'brevity is encouraged'.

For community pharmacists, most comments regarding the influence of time were concerning MURs as these are often the first and most common type of clinic style consultation offered in community pharmacies. Pharmacist 3 felt that she should be conducting an MUR in 15-20 minutes but that this had stretched to 45 minutes in many cases, particularly when she was new to providing the service. She found it difficult to curtail the conversation without appearing rude and whilst allowing patients to continue their involvement in the discussion. Pharmacist 2 also found difficulty in keeping to time as patients were chatty and reported that it is not possible to spend an hour conducting an MUR whilst maintaining the other duties of a community pharmacist. The conflict between dispensing duties and extended patient counselling resulting in interruptions, and a lack of time for patient interactions, has been reported in the literature (De Young 1996b; Pronk, Blom et al. 2002; Lindhe Soderlund and Milsen 2009). The difficulty of stopping patients from talking in consultations has also been discussed (Chen and Britten 2000). Pharmacist 3 explains that keeping consultations short can feel contradictory to one of the main aims of MURs:

> *Ph3 (10 yrs qualified; community; female): You try not to advertise that when you say, you try not to say, 'We've only got fifteen minutes'. Because that's the whole point is the fact that they, the points that they don't get time to discuss with the doctor, they get to discuss with you. That's the whole point, you know, to try to get out those details which they get rushed through at their GP's and they don't get a chance to speak about.*

Pharmacist 3 feels that allowing patients the chance to talk about issues that can get missed in other consultations is hindered by the time restrictions placed on MUR consultations. Pharmacist 1 also aimed to give the patients the chance to discuss matters that were not discussed elsewhere and reported that in his opinion, 10 minutes was not long enough and did not give the patient "sufficient time". However, in contrast to the views reported above, pharmacist 1 did not see time as an obstacle during consultations as the pharmacy was covered by other staff members during these sessions. Pharmacist 1 explained that he expected an initial MUR interview to take about an hour, but that he was happy if it took two hours, providing that the patient benefited and knew how to take their medication correctly. This is substantially longer than other pharmacists expected to spend in consultations with their patients but research has suggested that the extra time may not always be required; a study exploring medical consultations reports that consultations do not have to be longer to meet patient needs (Jenkins, Britten et al. 2002). The differences in communication that occur in pharmacist 1's longer consultations are explored further in chapter 6.

Pharmacist 9 was just one of the pharmacists who felt the pressure of keeping to time during consultations due to patients waiting for the next appointment slot in the waiting room. Here he explains the direct effect that this has on communication:

> *Ph9 (23 yrs qualified; primary care; male): Time pressures are there, the system is just designed that way and er patients' attendances and the demand is such that you have to guillotine what you say and also guillotine what you hear probably.*

Pharmacist 9 says that the time pressures can ultimately lead to missing information given by the patient but he feels that unfortunately, that is the way that consultations will continue. Only one consultation was observed for pharmacist 9 and the patient reported feeling that pharmacist 9 always had time for her, and she felt that she had plenty of opportunity to contribute to the discussion and that her contributions were valued which suggests that time constraints may not necessarily create difficulties for patients.

Money was the second resource mentioned during pharmacist interviews and was discussed by pharmacists 1, 2 and 3. All three are community pharmacists and the influence of money was considered in relation to MURs for which pharmacists are paid £25 per consultation to complete. This includes assessment and recruiting of suitable patients, conducting the consultation and completing the required paperwork. At the time of the interviews, reimbursement from PCTs for services such as MURs was new to community pharmacy and pharmacists were aware of the new system of placing monetary value on the provision of such services. Whilst the pharmacists interviewed were enthusiastic about conducting MURs, they were aware that whilst they were conducting private consultations, they could not be present in the main pharmacy overseeing pharmacy sales, processing prescriptions or answering patient queries. If locum cover was found to allow the pharmacist the freedom to conduct MURs, this had to make financial sense, and in many cases, be approved by head office. Pharmacists reported that finding locum cover for an hour was impractical, but filling a whole morning or day with consultations was also unrealistic, leaving many pharmacists to balance the consultation with regular pharmacy duties. The quote below from pharmacist 2 explains the conflict between clinical and financial drivers for pharmacy services:

> *Ph2: One of the problems I've had with MURs personally is that I was doing them appointment system erm and you get 25 quid for an MUR and therefore you need to give 25 quids service... (patients) want to talk in depth about their medicines and that was taking a long time... which is good, but it aint 25 quid a service particularly when you take into account the amount of paperwork that you have to do and the follow up afterwards on an MUR.*

The reimbursement for conducting MURs directly influenced the amount of the pharmacists own resources that could be allocated to the consultation and the direct system of payments for MURs meant that pharmacists were highly aware of providing a value for money service.

Pharmacists reported that both time and money were key resources affecting the provision of clinic-style consultations and the communication that occurs within them. Only one pharmacist interviewed felt that he had sufficient time to spend conducting consultations and was happy to spend as long as needed to ensure that the patient understood their treatment. Time was limited for all other pharmacists and resulted in consultations that were cut short and restrictions on the amount of conversation that could take place, potentially leading to important matters being missed. If consultations had to be cut short, communication skills were increasingly important to enable the most benefit to be gained from the time allowed. Community pharmacists were also aware of the cost of providing services such as MURs and ensuring that services made financial and clinical benefits to the pharmacy.

4.6 Summary

The study pharmacists reported varying experiences with formal teaching of communication skills. Most pharmacists had poor experiences with undergraduate teaching and the data shows little recall of useful training at this level. This may represent a missed opportunity and it is important that maximum learning potential is reached in this time of compulsory studies. Training during the pre-registration year was better received and was found to be more useful but was not available to all. Post-graduate training is often not focussed on consultation skills, but has been found to be effective by those who accessed it. Any efforts to enhance formal communication skills training for pharmacists must include both underpinning knowledge and practical opportunities to practise new skills. Opportunities for observation of real consultations, with structured feedback, will help pharmacists to implement their new skills into practice. Training should be clearly linked to professional practice in order that pharmacists are able to see the relevance of their new skills. The data suggest that communication skills training would be most useful to pharmacists if implemented at an early stage, allowing time to develop general communication skills based on theory. More advanced techniques could then be taught when required, as pharmacists progress through their career and begin to take on new roles. Pharmacists highly valued the role of experiential learning of communication skills through experiences both at work and wider experiences in life. They reported an ability to reflect on both their own communication skills and those of others in order to improve and develop their own practice.

Almost all of the pharmacists interviewed reported that good communication skills were important to facilitate the accurate transfer of information to patients. Respondents felt that this is a key role of pharmacists and helping patients to understand their treatment is essential in conducting a successful consultation. The pharmacists presented a range of ways to ensure that patients learnt from their consultation, including creating an atmosphere conducive to communication, checking patient understanding during the interaction and tailoring the information to the individual patient. The pharmacists reported that they relied on responding to the patients' cues in combination with prior relationships in order to tailor the information. Ensuring that the patient receives information and advice relevant to their personal needs is central to patient-centred consultations but research suggests that relying on pharmacists' perceptions of the patient's requirement for information may not be enough and that actively determining patient needs is important (Lilja, Larsson et al. 2000a; Lilja, Volmer et al. 2008).

Building up relationships with patients was also reported to influence the provision of care by helping to ensure that patients felt able to discuss personal information with their pharmacist. Relationships were improved by taking the time to talk to patients and building up trust. Conveying empathy to patients was also important in facilitating consultations and ensuring that patients feel their contributions are valued by the pharmacist. The pharmacists reported that their personality also influenced communication with patients by altering the style of the interaction; but this was viewed as secondary to the communication skills that are essential in effectively giving information and advice to patients. Personality was reported to facilitate building relationships with patients and when combined with experience in consultations, resulted in the good use of communication skills. Experience also engendered confidence in the pharmacists which was reported to influence both communication and patient outcomes through building of trust. The data suggest that relationships, trust, empathy, personality, confidence and experience all link together to influence the personal style of the pharmacists' communication and these elements are essential in allowing patients to openly communicate during consultations, and to ensure that the patient receives maximum benefit from their consultation.

Pharmacists reported that a key use of their communication skills within a consultation was centred on enabling the patient to participate in the interaction. Encouraging patients to set their own agenda, and to utilise their own communication skills in order to get the maximum benefit from the consultation was reported to be difficult but helped in creating patient-centred consultations when achieved.

The data show that the location of a consultation can influence communication in a number of ways. A key aspect of location raised by pharmacists was the availability of private consultation areas. This was again felt to be important in facilitating patient communication and ensuring that they felt comfortable and able to discuss sensitive matters in confidence with their pharmacist. Some concerns were raised about the use of consultation rooms in community pharmacy but it is encouraging that pharmacists are aware of the impact location can have on consultations. By creating a space suitable for consultations, pharmacists will be able to enhance the communication within those consultations. The influence of location on patient perception of the pharmacist was also raised with regard to consultations conducted in GP surgeries. It was reported that patients were more willing to spend time listening to advice offered by pharmacists working at GP surgeries but that there was confusion over the role of the pharmacist. Primary care pharmacists are relatively few in number and it will be important to build patient knowledge around their specific roles and services. If pharmacists are able to build on the more accepting patient perceptions and provide high quality consultations, patients may be willing to take up a wider range of pharmacist-led services.

Time and money were reported to affect pharmacist-led consultations and this was primarily a negative influence. The pharmacists reported that they were often short of time which limited the discussion that could take place. It is essential that pharmacists are able to utilise good communication skills to maintain control of consultations and keep to task in order to achieve the aims of the consultation. Community pharmacists in particular struggled with juggling regular pharmacy tasks with new counselling-based services and new ways of working may be needed to ensure that patients are able to receive sufficient time and attention from the pharmacist. Community pharmacists were also concerned with the cost of services such as MURs due to new systems of payment. Direct payment for each consultation heightens awareness of the financial aspects of the service and can divide the focus of the consultation. Whilst the system of reimbursement per consultation may currently only apply to community pharmacy, the increasingly cost conscious NHS in the UK may force all pharmacists to consider the services that they provide in financial, as well as patient based terms.

Chapter 5.Patient Interviews

5.1 Introduction

During this study two separate semi structured qualitative interviews were conducted with each of the 18 patients recruited. The first of the two interviews with each patient was conducted immediately prior to the patients' consultation with the pharmacist. The purpose of this initial interview was to establish the patient's understanding and opinions of pharmacy in general terms and also to focus on any thoughts, concerns or aims regarding the arranged consultation. The second interview was conducted immediately after the pharmacist-patient consultation and gave patients the chance to talk specifically about the consultation, reflect on the communication within the consultation and to relate their experiences to previous pharmacy encounters. A summary of the patient demographics is given in Table 5.1.

Table 5.1 Summary Demographics of Patient Participants

Summary Demographics		Number of Patients (n=18)
Sex	Male	9
	Female	9
Age (Years)	18 – 30	0
	31 – 40	0
	41 – 50	0
	51 – 60	5
	61 – 70	6
	70+	7
Location of Consultation	Community	7
	Hospital	10
	Primary Care	1

One of the main aims of this research was to discover patient views about the communication that occurred in pharmacist-patient consultations. Current literature is lacking in this area and it was hoped that the results of this study could add to the existing research. The analysis has shown the interviews to be rich in data covering a range of topics related to communication with pharmacists, however, patient thoughts about specific communication skills were hard to elicit. Communication can be an abstract idea for some people to consider and most day to day interactions do not require people to be aware of the communication skills that they are using and this makes it a difficult topic for an interview. In addition the patients had just attended a consultation concerning their health care and in order for the consultation to be helpful, they were inevitably focused on the content of the communication and not the process. Consequently patients were less aware of the communication skills used during the consultation and the questioning style used in the interview had to become more structured. Indeed many patients reported that they did not particularly notice the communication within the consultation and suggested that it was therefore ‘normal’, or as would be expected. Patients did respond to more structured questions but few undirected themes emerged. A recent study supports this theory and suggests that patients are too busy attending to their role in the consultation to observe communication (Kenny, Veldhuijzen et al. 2010). This suggests that in order to effectively assess the communication skills utilised in pharmacist-patient interactions, it is essential to have access to actual consultation data, ideally in the form of audio or video recordings. Analysis of the audio-recordings of consultations within this study will be presented in chapter six.

This chapter will explore four of the main themes to emerge from the analysis of the patient interviews including: patient expectations; relationships and trust; patient centred interactions; and finally the environment in which consultations take place.

5.2 Patient Expectations

During the first interview patients were asked about their expectations of a pharmacist. There was considerable variation in the responses which was in part due to differences in past experiences, ranging from only one prior encounter to many years of frequent interactions with a pharmacist. The lack of clarity over the role of pharmacists in the UK today was a small but significant theme to emerge from the data and patients’ expectations may be affected by poor understanding of the place of pharmacy in the healthcare system. The quote shown here from patient 12 is extracted from a conversation with the patient about how her visit to a hospital clinic was progressing.

> *Pt12/Int1 (70+, Female, Hospital): The video, I've had that, blood test, I've had that, a clinical nurse-specialist who does your oral anti-coagulant accordingly, I've not seen her yet. Is she a Pharmacist, the clinical nurse-specialist?*

The quote shows a clear misunderstanding between the two professions of pharmacist and nurse and suggests a poor grasp of the distinction between the two roles. Whilst the professions differ enormously, there is increasing overlap in some aspects of the two roles which may lead to confusion for patients. Whilst increased exposure to pharmacists and advanced services may help to reduce this problem by better informing patients, this study provides insufficient data to determine whether a more active strategy is required. Pragmatically, if the patient is receiving the best possible care, from the most appropriate professional, and knows how to access this care, it may not be important that they know which profession the practitioner belongs to.

The lack of clarity over the role of the pharmacist in some cases extended to uncertainty over the consultation. Whilst some patients had a broad idea of the purpose of the consultation, few felt that they had received sufficient information prior to the consultation to form a firm idea of what would happen. Only a few patients were worried by this and all were happy once the consultation had concluded. The data suggest a general lack of understanding of the role of a pharmacist, the services that a pharmacist can provide, and what those services might entail which is supported by findings in the literature (Chewning and Schommer 1996; Lisper, Isacson et al. 1997; Skomo, Desselle et al. 2008; Stewart, George et al. 2009).

When reporting expectations of a pharmacist, the most common response, given by nine of the patients interviewed, was that they expect a pharmacist to possess a high level of knowledge related to medicines and that they will be able to pass that knowledge on to their patients. This has also been reported in the literature (Hermansen-Kobulnicky and Worley 2008) but is in contrast to an earlier study in Sweden which indicated that patients did not generally view their pharmacist as a source of information about their medicines (Lisper, Isacson et al. 1997). It is encouraging to find that this perception appears to be improving over time and that for the patients interviewed the most important aspect of their pharmacy service was the provision of information and advice; in addition, this is a key area of service provision highlighted by the Department of Health (Department of Health 2003). Community pharmacists in particular are an easily accessible and reliable source of health care advice and information. In order for this service to be as effective as possible at helping patients to receive the best possible health care, patients must both be aware of, and access, the services provided by community pharmacists. A 2002 study of 10 type 1 diabetic patients in Denmark found that patients were unaware of the advice giving role of pharmacists (Haugbolle, Devantier et al. 2002). In contrast these data demonstrate that for half of the patients interviewed, the provision of accurate and reliable advice and information is what they expect from their pharmacist, showing an awareness and acceptance of this role.

The expectation of six of the eighteen patients interviewed was not a reflection of the clinical or pharmaceutical knowledge of the pharmacist, but rather expectations on a personal level. Patients reported that they expected a high level of personal interaction, for example courtesy, helpfulness, friendliness and for the pharmacist to listen. Patients also expected the pharmacist to be able to utilise these skills in the tasks of providing information or answering questions. One patient explicitly disagreed and explained that proximity of the pharmacy to his home was substantially more important than the attitude of the pharmacist:

> *Pt4/Int1 (61-70, Male, Hospital): To be quite frank with you, the reason, the reason I came to a specific Pharmacist is because it’s nearer for me to walk. So it was, I mean irrespective of their attitude, I would still continue going to them because it’s more convenient for me. Er, but I mean, I think it would, no I mean unless they’re downright rude I wouldn’t, I couldn’t care less really.*

One of the main services provided by community pharmacies is the dispensing of prescriptions. This has historically been the fundamental aspect of community pharmacy and still plays a large part in making up the more modern role. Almost all of the participants interviewed mentioned that they have used this service at some point. For three of the patients, it was their main expectation of a pharmacist.

Three patients reported that they were frustrated by the length of time taken to dispense a prescription as illustrated in the quote below.

> *Pt8/Int1 (70+, Male, Hospital): I find sometimes like a lot of people like, you know, when you go to these pharmacies just lately like, you know, you're having to wait before you can get your tablets and I think sometimes that is a little bit aggravating for people like, you know, having to wait.... They turn round and say, 'Well it won't be ready for about ten minutes or a quarter of an hour'. You might have to wait for, to get your tablets right, they seem to be a bit slow like at me local one and I can't understand why we have to wait so long sometimes. I mean I've known like to wait twenty minutes, nearly half an hour sometimes to get the tablets.*

This was also an issue that arose in interviews with the pharmacists. The pharmacists stated that patients' expectations were often too high and that patients did not understand the process of dispensing. Research has suggested that in a study of 36 patients, 69% would be prepared to wait more than 10 minutes to speak to the pharmacist (Harper, Harding et al. 1998). The difference shown in the data presented above may be that patients are less accepting of a wait to collect a prescription than to speak to the pharmacist. A small study conducted in three Dutch pharmacies shows that 77% of customers were inactive whilst waiting for their prescription and suggests that pharmacies may be able to provide materials or activities to both inform the patient and distract them from the wait (Mobach 2007). This may help in reducing patients' frustration at waiting but ultimately an understanding of the roles of the pharmacist and the processes involved in performing those roles may be required.

It is surprising that this familiar function of community pharmacy was not more commonly stated as patients' main expectation of a pharmacist. This suggests that patients are starting to access a wider range of services from their pharmacist and many of the patients commented that their expectations and opinions of pharmacists had changed over time. Eight of the patients interviewed specifically mentioned a recent change in being able to talk to your pharmacist more, and this was linked to advertising in the media urging people to seek advice from their pharmacist as described by patient 10 here:

> *Pt10/Int1 (51-60, Female, Hospital): yeah and I think its pushed more now, the fact that you can go and ask your pharmacist isn't it, by the media. I mean at one time you went to your GP, you wouldn't dream of asking the pharmacist a question but now you're encouraged to do that....I suppose without the media pushing it, I would have never done that.*

A concern that pharmacists raised during interviews was the tendency of consultations to overrun due to tangential conversations and chatty patients. The results show mixed awareness of time pressures within the consultations. An example from patient 17 illustrates a case where the patient does not feel any time pressures.

> *Pt17/Int2 (51-60, Female, GP Surgery): I never feel that there's pressure on his time.... I don't feel that he's got a slot time for me necessarily, that there's another person or three or four knowing how long it's taking. I never feel there's pressure from another patient. Erm, I always feel as if he's erm, he's ready to listen.*

Interestingly, this consultation was arranged using a GP appointment booking system and the pharmacist was subject to the same time restraints as the GPs. Despite only having a 10 minute appointment, the patient did not feel pressured by time within the consultation and the pharmacist was able to create a feeling of having time to listen to this patient. Other patients reported that they were aware that the pharmacist must be busy, and were concerned that they were taking up too much of the pharmacist's time, even if the pharmacist did not indicate this and this is demonstrated by the extract below.

> *Pt14/Int2 (70+, Female, Community): I did get a little anxious that I was prolonging it, that I was making it longer than, than I should have done and he probably had a lot of work to do out there, so afterwards I thought it's me again, you know, I've too much to say.*
>
> *I: Did he give any indication that he needed to get on?*
>
> *Pt: No, no he didn't but I feel he did.*

It has been reported that patients have stated the pharmacists' lack of time as a barrier to communication (Skomo, Desselle et al. 2008). There must be a balance between creating a feeling of time for communication, allowing the patient time to participate in the consultation, and keeping to a schedule. Achieving this balance without the patient feeling short-changed is a difficult task but training and practise should facilitate the process for pharmacists.

5.3 Relationships and Trust

A key theme to emerge from the patient interviews was that of building relationships with a pharmacist. The data relate primarily to community pharmacists, as this is more commonly where patients have the opportunity for familiarity and relationships to build up over time. Of the eighteen patients interviewed, eleven reported that they had built up some form of relationship with their local community pharmacist, and that this relationship or familiarity had a positive impact on them. There was variation in both the extent of the relationship, and the effect that this had on the patient. This section will first explore how building relationships affects two emergent themes; the importance of social interaction with the pharmacist and continuity of care. This section will conclude by exploring the place of trust within the pharmacist – patient relationship.

As relationships between patients and pharmacists develop, the opportunity for more personalised conversations increases. One example of the way in which knowing your local pharmacist can affect a visit to a pharmacy is shown in the quote below and illustrates the importance of social or non-medical conversation in an interaction in the pharmacy.

> *Pt8/Int1 (70+, Male, Hospital): Oh it makes a lot of difference like because you have a personal contact like, you know, and being personal like it's, it's great like, you know, you get that uplift like because you seem to get better treatment like from them like, you know. Whereas like an ordinary one will just, shall we say [company] or something like that they come out, just hand them to you and then they've gone like, you know, they don't, there's no conversation like, they don't talk like, you know, like you would do like a local one.*

The ability to engage in casual or social conversation with pharmacists was an important factor supporting the building of relationships for many of the patients interviewed. Patients felt that they were gaining more than health care from their pharmacist. The data suggest that building relationships with a pharmacist could result in more advice seeking from patients. This is demonstrated by patient 14, who explains the value of the relationship that she has with her pharmacist:

> *Pt14/Int1 (70+, Female, Community): I think I'd be quite happy to ask another pharmacist but it's more comforting to know that erm, you're speaking to your pharmacist. You know, your own pharmacist, like the doctor.*

By labelling the pharmacist as 'her own' this patient shows that a strong bond has been created between the two parties. It is encouraging to find that patients are able to build such deep links with their pharmacists and is a strong endorsement of the positive impact of local relationships. Building relationships with a pharmacist has been shown to increase patients' perception of their self efficacy in medicines management (Worley-Louis, Schommer et al. 2003) and to promote open communication (Kielmann, Huby et al. 2009), but research shows that there is still some way to go before patients perceive their relationship with a pharmacist to be as high quality as their relationship with their doctor (Keshishian, Colodny et al. 2008).

The pharmacist’s knowledge of the patient’s family and circumstances was another reason given for the importance of building up a relationship with the pharmacist. Nine of the patients interviewed expressed the importance of family knowledge. Other patients stated that this made the pharmacist seem more caring and interested and ensured that they felt valued by the pharmacist. Patients reported that participating in a clinic-style consultation with their pharmacist helped to build rapport and reinforce the relationship.

The second major reason given in support of building up a relationship with the pharmacist is the continuity of care which can be provided. Regularly using a single pharmacy enables the pharmacist to access accurate information relating to the patient’s previous medication and their medical history. This bank of knowledge was mentioned by seven of the eighteen patients interviewed and patient 18 gave a specific instance to demonstrate the importance of the pharmacist knowing her medication history.

> *Pt18/Int1 (61-70, Female, Community): He said to me, ‘I don’t really think you should take this’ and I said, ‘Why not?’ And he said, ‘Because you’re on high blood pressure tablets and they won’t go well together’. And he did that without looking at any notes or anything. He knew me and that was absolutely invaluable.*

Patients placed high value on the interventions that their pharmacist was able to make either through personal knowledge, or computer records, and felt that their health may have been adversely affected if this had not been the case. In this context the patient medical history built up through the patient-pharmacist relationship has directly benefited patient care. Research conducted in medical consultations explored links between continuity of care and ability to discuss personally important aspects of patient care (Freeman and Richards 1994). Freeman and Richards found that the communication skills of the doctor were more important than continuity of care but the patients interviewed for this study reported different reasons for the importance of continuity of care; the data show that it is the increased knowledge associated with continuity of care that patients value in the community pharmacy setting. Patients also reported the importance of building relationships and rapport in encouraging patient participation which is supported by the findings of the continuity of care study.

Analysis of the data suggests that it is not essential to have this prior relationship in order for a consultation to be successful. None of the patients whose consultation was in a hospital clinic had met the pharmacist prior to their appointment but all reported a successful consultation. The circumstances and context surrounding consultations vary enormously and the perceived importance of attending a hospital clinic could mean that interaction on a personal level with the pharmacist is less significant. However, the ability to quickly build relationships within the consultation was reported to be important in enabling the patient to feel comfortable early on in the consultation. Patients reported that being able to find common ground with the pharmacist early in a consultation was enough to compensate for talking with an unfamiliar pharmacist. The importance of being able to quickly relate to a pharmacist was expressed by patient 13:

> *Pt13/Int2 (70+, Female, Community): Once you're in a room with a doctor or a specialist, no matter how good he is, if you can't take to them your mind goes a blank, and you can't tell them what's wrong with you and you don't want to know.*

Patient 13 stressed the importance of a relationship with her regular healthcare providers and if there is no such personal history, then being able to easily relate to somebody is an acceptable alternative. For patient 13, if neither of these things occurs she feels unable to fully participate in a consultation, potentially risking a negative effect on her healthcare. One patient felt that a fifteen minute consultation was not long enough to build rapport but that this did not impact on the consultation. Research has shown that pharmacists do not give attention to rapport and relationship building tasks during short prescription counselling interactions (Deschamps, Dyck et al. 2003). The interactions that were analysed occurred using simulated patients and the authors suggest that this may have caused the lack of relationship building skills; however, with the consultations lasting an average of just 3mins 20secs there was little time for building rapport.

Despite all the positive comments regarding the importance of pharmacist-patient relationships, it must be noted that six of the eighteen patients interviewed did not report the relationship to be important. At one third of the sample, this is a large proportion and shows that opinions are mixed. However, only one patient felt that it was better to conduct a consultation with an unfamiliar pharmacist and described that it can be embarrassing if someone you see on a regular basis knows personal details about you.

Trust was an element of the pharmacist-patient relationship that was specifically mentioned by seven of the patients. The key theme to emerge from the data is that trust is an important aspect of the relationship because patients need to be able to act with confidence on the advice given by the pharmacist. The consequences of inappropriate advice in healthcare can obviously be high. The extract below from patient 13 demonstrates the importance that patients placed on trust in their pharmacist.

> *Pt13/Int1 (70+, Female, Community): Now I think it makes a hell of a lot of difference, and I really do.... if you're in a quandary over something and you don't know what you want to know, and if he can answer you, I think that goes a long, long way. I do honestly. I think, it's trust is a lot with your chemist, trust is an awful lot.*

Patients reported that trust was built up over time and enhanced by participation in consultations such as those observed in this study. The patients also reported a variety of aspects of the pharmacist's characteristics or communication that were important to them in building trust. These were the confidence that the pharmacist portrayed regarding their own skills and knowledge, a smart appearance, including attire, treating the patient as an individual and non verbal communication, including maintaining good eye contact. In contrast an American study found that attire was not linked to trust in the service provider (Bentley, Stroup et al. 2005) but cultural differences may explain the variation in results. In addition Bentley's study was conducted by recruiting university employees who watched one of a selection of prepared videotapes and then completed a questionnaire. Responses from patients who were involved in a real consultation may vary from those in a controlled experiment.

Non-verbal communication is an essential aspect of communication as it mirrors an individual's innermost thoughts and feelings and is extremely hard to fake (Silverman, Kurtz et al. 2005). However, participants were largely unaware of non verbal communication within the consultation. If patients did notice any aspect of non verbal communication, it was usually eye contact, but this was often in response to direct questions. Comments on eye contact were mixed and there was not a clear single theme emerging from the data. Some patients felt that eye contact from the pharmacist was reassuring and helped in creating a comfortable and trusting atmosphere but others were not interested in whether there was eye contact or not.

Creating trust within a consultation requires good use of all of the above skills, particularly treating the patient as an individual. This is reported by patient 18 below, where she explains the importance of listening and taking the time to really understand the patient's problems.

> *Pt18/Int2 (61-70, Female, Community): I trust him completely and I think it's because (the doctor and) the chemist, they listen, they treat you as a person.*

The pharmacist's communication in this example has been rewarded with complete trust from the patient. Another patient summarised this by explaining that she felt that she mattered to the pharmacist, despite being one of many patients. Creating an atmosphere in which a patient feels valued requires dedication, professionalism and trust. Achieving trust within pharmacist-patient consultations has been reported as both a facilitator to (Kielmann, Huby et al. 2009) and product of (Bentley, Stroup et al. 2005) good communication in the literature. It has also been reported that trust in the pharmacist, as part of a quality relationship, is strongly linked with patient-centred consultations which the author defined as reflecting the pharmacist behaviours of being open and responsive to patient needs and concerns (Worley 2006). The importance that patients place on trust has also been reported in medical literature (Burkitt Wright, Holcombe et al. 2004). The patients interviewed in this study found it difficult to comment of specific communication skills and the detail reported in relation to trust reinforces the importance of trust within the pharmacist-patient interaction.

The data show that building a personal relationship with a local pharmacist can help patients to feel more at ease when asking advice or attending consultations. In some cases this can lead to friendships forming and the pharmacist builds up knowledge of the family history in conjunction with the patient's medical history. When a consultation is conducted with a pharmacist who is not known to the patient, the ability to rapidly build rapport and relate easily to each other can be a substitute for a past relationship. Not all patients place importance on a personal relationships and there are contexts where a relationship is undesirable but the data suggest that the ability to forge relationships with patients is a key attribute of a pharmacist.

Trust is only one aspect of any relationship but was a key theme to emerge from the data which suggests it is one of the most important. The patients interviewed highly valued the trust that they had with the pharmacist during the consultation and with their regular pharmacist. Establishing trust with a patient may appear to be an obvious requirement for successful treatment but the data show that it is fundamental in doing so.

The next section will explore how pharmacist and patients can work together to create a patient centred consultation by increasing patient participation.

5.4 Patient Involvement in Consultations

A key aspect of achieving the best patient outcomes from a consultation is encouraging patient communication. During the patient interviews, two patients described their own expectations of patient communication and patient's responsibility within a consultation. They reported that patients, as well as pharmacists, should display good manners, be polite and make sure that they explain their symptoms effectively as shown below:

> *Pt18/Int1(61-70, Female, Community): some people think the doctor, the Pharmacist will know exactly what is the matter with them without telling them....People do not explain their symptoms and I think they expect a lot of the Pharmacist, in a short time.*

In this extract patient 18 describes that when patients do not communicate well, it is difficult for a health care practitioner to fully understand their symptoms. The current focus on patient participation within healthcare research and practice may result in an increased role for patients in consultations. The data show that some patients within the study value the ability to have input into their healthcare and the feeling of more control in a two-way consultation. It is essential that healthcare professionals facilitate patient involvement in consultations by focussing on the individual patient and considering their requirements for open communication. All eighteen of the patients interviewed reported that they felt able to participate in the consultations observed during the study.

This section of chapter five will explore how patients feel that pharmacists encouraged their participation in consultations through creating the right atmosphere and the use of tailoring, before moving on to consider the place of patient questions within pharmacist-patient consultations.

5.4.1 Encouraging Patient Participation

A key theme to emerge from the patient interview data was the importance of creating an atmosphere conducive to communication. Within a healthcare consultation, this must facilitate two-way communication and encourage the patient to participate in the interaction. Nine of the patients interviewed reported that their consultations had a comfortable, relaxed and friendly atmosphere, with patients explaining that this made them feel at ease and informal. The data show that patients felt a relaxed atmosphere made it much easier for them to contribute to the discussion throughout the consultation. Many patients described the pharmacist’s tone and manner as skills that were used to create the desired atmosphere within the consultation.

Only one patient reported that they did not feel relaxed within their consultation. At the opening of her consultation there was a period of several minutes when nothing was said between the two participants. The pharmacist was working on the computer and the patient was waiting for the session to begin. It was observed that the atmosphere was awkward and the waiting time seemed to drag. The consultation then began abruptly and the lack of opening structure was noticed by the patient. The extended quote below shows the impact that this had on the patient.

> *Pt6/Int2 (51-60, Female, Hospital): Initially it would have been nice if he'd actually spoken to me by name and just explained what he was doing. After that everything was fine, it was clearly explained... It was just that initial one or two minutes which I think he could have said, 'Right Mrs (x) I just need to put you on the system', or whatever....And I was sitting here, I didn't quite know what he was doing and then he stood in the door, 'I'm just getting things on the system'......The introduction really, yes. Yeah. Because I can't remember if he told me his name....So it wouldn't have taken time just to sort of look at you and said, and still carried on....Just say, 'Hi Mrs whatever. I'm' and introduce himself. 'I'm just going to put you on the system now so I'll just be a few minutes sorting that out and then I will explain everything to you'.*

During the post-consultation interview, the patient spent a lot of time explaining that she had felt uncomfortable and unsure what was happening during this time. She had previously been to similar consultations but felt that a sentence of opening and explanation would have reassured her. She would then have been happy to wait while the pharmacist prepared everything for the consultation. This significantly affected the beginning of the consultation and the patient reported that it took a while to settle into the interaction. Her later comments praised the pharmacist for his clear explanations and she felt the rest of the consultation was of a high quality. This emphasised the difficulty of the consultation opening to her. This report gives an insight into how important structure is within a consultation and its impact on the atmosphere of the consultation. The interaction was complicated by absence of an introduction and shows that it is not only the pharmacist's manner or tone that contribute to creating the right atmosphere for a consultation, but that careful attention to the structure is also important. This is supported by the consultation data and will be discussed in more depth in chapter 6.

There are many factors that affect the atmosphere within a consultation and the data presented here show that if just one of these factors is not right, and the atmosphere suffers, then patients easily pick up on this. The data given here do not suggest how patient health outcomes could be affected.

The second theme to emerge from the data was the tailoring of consultations. A significant aspect of ensuring that a consultation is patient-centred is tailoring the information and advice so that it is specific to each individual patient (Lilja, Larsson et al. 2000a; Kansanaho, Isonen-Sjolund et al. 2002; Jones 2009; Montgomery 2009). Healthcare professionals conduct consultations in their area of expertise which can often result in similar consultations from one patient to the next. This repetition or scripting has been described in a range of institutional settings including health care (Drew and Heritage 1992). In particular the density or concentration of repeatedly used items of 'conversational machinery' in talk oriented to institutional settings has been described with respect to telephone calls for emergency assistance (Zimmerman 1992). However, if a patient-centred approach is to be adopted, the information to be covered in each consultation should be considered in relation to each new patient. It is not only information that can be adapted to each patient but any aspect of the consultation including setting, structure, language and so on. This concept of tailoring the consultation to suit each patient was considered by eight of the patients interviewed for this study.

Of these eight patients, seven felt that the pharmacist had tailored the consultation to them. The patients reported a variety of ways in which they felt their consultation had been tailored including altering the descriptions and language used to match the patient's level of understanding, which was described by patient 6.

> *Pt6/Int2 (51-60, Female, Hospital): sometimes when, even though er you know someone's experienced in it, people stick to a script and will still go over things that are unnecessary and explain again. So I think he was intuitive enough to realize that I was aware of these things.*

As mentioned above, patient 6 had previously attended the same warfarin clinic several years earlier and felt that the pharmacist was able to deviate from his script in order to give her a tailored consultation. The concept of the pharmacist following a set script or programme was mentioned by several patients. Patient 17 explained that although her pharmacist was following a treatment programme, he was able to deviate from this path and concentrate on other issues, or adjust treatment regimens in order to suit her. When conducting routine consultations, healthcare professionals, including pharmacists, often have key requirements to cover during the consultation and the recurrence of specific topics can result in practised or scripted fragments of the consultation, as described in emergency calls above (Zimmerman 1992). This was acknowledged by the patients and although it can be positive as patients receive clear and confident advice, such scripting must be combined with the ability to tailor the remaining consultation in order to suit the individual patient. Patients reporting a tailored consultation felt that this positively impacted upon their experience of the consultation, as the pharmacist seemed more interested in them as an individual. This helped patients feel able to participate in the consultation. The use of scripts within consultations was also described by pharmacists in chapter 4 where it was reported that scripts need to be used in combination with tailoring to the patient in order to achieve good consultations. The use of scripts will be explored in greater detail in chapter 6.

Not all patients reported tailoring in their consultations and one patient interviewed in this study did not feel that his discussion with the pharmacist was individualised at all.

> *Pt9/Int2 (61-70, Male, Hospital): well I didn't feel he was relating to me specifically. I mean he was doing his job in terms of X is wrong and you've got to do A, B and C to cure it or (pause) I didn't feel that he was sort of at a personal level even.*

This patient was not criticising the overall consultation as he felt that it had gone well but he did not think that it was a personalised discussion. This is in contrast to other patients describing the same pharmacist, which suggests that individual patients may play a part in determining how individualised a consultation is.

The data show that both atmosphere and structure were important in facilitating patient communication. Patients reported that if they felt at ease, they were more likely to participate in the consultation. Patients felt that if their consultation was tailored to them, the pharmacist was interested in their comments and, again, the patients felt more able to communicate.

The next section will explore the importance of questions in patient communication.

5.4.2 Asking Questions

The ability to ask questions was one of the key ways in which patients were able to relate to and evaluate their own communication and participation within a consultation. The data presented in this section are analysed to explore patient views concerning question asking from two perspectives. Firstly questions that were planned in advance to ask during the consultation, and secondly a reflection on question asking during the consultation.

A key theme emerging from the patient interviews was the importance of being able to ask questions, however, only four of the eighteen patients had prepared in advance any specific questions to ask during their consultation and an additional two had thought of areas they were hoping to find out more about but had no specific questions. A range of reasons were given for not preparing questions, including being unsure about what would happen, maintaining a good level of personal knowledge of current medications and wanting to wait and see how the consultation would proceed. A lack of patient experience of pharmacist-led consultations may also inhibit the planning of questions in advance, as patients may not know what to expect. The difficulty that patients experience in deciding what topics will be relevant to discuss during a consultation have been described in relation to genetic counselling (Pilnick 2002). Almost all patients reported that they had not received sufficient information prior to their consultation. The importance of being prepared for an interview is supported by medical literature (Cegala, Gade et al. 2004). The questions that patients did prepare in advance varied but were all related to the patient's medication which demonstrates an understanding of the broad purpose of the consultation, or role of the pharmacist. Overall the patients did not focus on planning questions in advance of consultations. This was also reported in chapter 4 where it was the data show that patients often attend a consultation without their own agenda, or do not voice it during the consultation.

For the patient's interviewed, it did not matter whether they had particular questions to ask, but that they were given enough chances to do so. This included both asking questions during the course of the consultation, and a designated opportunity for questions at the end of the session. All eighteen patients reported that they found it easy to ask questions throughout the course of the consultation with the pharmacist. This is a very positive finding given the importance that patients themselves place on the ability to ask questions and was strongly linked to the atmosphere of the consultation as outlined above. There was no difference in the ease of question asking reported between patients having consultations in the different sectors of pharmacy. The importance of pharmacists providing clear opportunities for patients to ask questions both at designated opportunities, and throughout any interaction has been reported in the literature (Schommer and Wiederholt 1997). Deschamps et al report that pharmacists gave patients the opportunity to ask questions in 85% of encounters (Deschamps, Dyck et al. 2003). Research also suggests that patients may be unaware that they are able to ask questions (Chewning and Schommer 1996; Schommer and Wiederholt 1997) but this was not reported by the patients in this study. Differences from this literature could be due to a number of reasons, including: increased patient confidence at asking questions since 1996/7 when the research was published; differences between the USA and the UK; the relationships that some of the study participants had built with their pharmacist or the influence of participating in a clinic-style consultation rather than unplanned interactions. The question asking behaviour of patients has also been linked to patient and physician opinions of patient competence in communication and suggests that an increase in asking questions indicates good communication skills for a patient in primary care consultations (Cegala, Gade et al. 2004).

Despite the patients' reported confidence in asking questions, they still raised some concerns about doing so. One of the main worries that patients had regarding asking questions was that they may forget the question, or only think of questions after the consultation had ended. This was raised by five patients during the second interview. To help avoid this, several patients mentioned the importance of asking questions when they arose, rather than waiting for a designated time, so that questions are not forgotten, or alternatively using lists as an aide memoire. These points were raised by several patients but are all summarised in this quote from patient 10.

> *Pt10/Int2 (51-60, Female, Hospital): I ought to have written them down but did I hell, cos you do tend to go off on a tangent and then you forget what you wanted to ask in the first place. It's very easy to do that and then you walk out and think ah, I should've asked that and it's too late you've gone. But he did say there's this number so I can ring up if I wanted which is nice...yeah you're not on your own, it is a back up isn't it, you're not on your own, you've got somebody to contact.*

This quote concludes by talking about a dedicated phone line for patients of this clinic to use if they have any problems or questions. This service was valued by patients, both to offer support in case of future problems, but also to enable asking of any further questions that may arise after the consultation. It was reassuring for patients to be able to contact the pharmacist again in the future if they needed to. This has been found in a recent study looking at patient self-care where participants also reported the value of easily accessible, flexible healthcare (Kielmann, Huby et al. 2009).

The data showing patients' concerns over remembering to ask all of their questions suggest that pharmacists need to provide distinct opportunities for asking questions. The importance of being offered an explicit opportunity for asking questions at the end of the consultation was reported by three patients. The patients felt that this served two functions, firstly to provide a distinct opportunity for the patient to ask any further questions; this is especially important for any patients not confident at asking questions during the course of the consultation. Secondly this served as a signpost indicating that the consultation was drawing to a close which prompted the patient to raise any other items that they wished to talk about. This view is outlined by patient 10:

> *Pt10/Int2 (51-60, Female, Hospital): It's always nice if at the end of an interview which he didn't do actually but at the end, is to say 'is there anything you wanna ask me? Have you got any questions for me? You know, is there anything you're worried about. I suppose he did do it in a roundabout sort of way 'cause he said these are the numbers, any problems, ring.*

The above extract again shows that if a section of a consultation is missed, it is noticed by the patient, as this patient says she was only given the opportunity to ask questions in 'a roundabout way'. As the patients interviewed did not notice many particular aspects of communication without prompting reports of missing aspects of the consultation, such as an introduction, or a chance for questions, add weight to the importance of structure within pharmacist-patient consultations.

Finally in relation to asking questions in a pharmacist-patient consultation, this section will look at what patient's do if they do not ask all of their planned questions. Two patients in this study did not ask specific questions that they had mentioned in the initial patient interview. When asked about this in the second interview, both patients responded by firstly admitting that they had forgotten. This supports the earlier data about the importance of writing a list of questions. When each of these patients was asked if they would raise the question at a future opportunity, both explained away the importance of the question and concluded that they may not need to ask after all. This is in contrast to the importance placed on the question by their pre-consultation preparation and reporting it during the first interview. The following extended quotes from patient 4 show pre-consultation thoughts about the question, and subsequently the process of rationalising the forgotten question.

Extract 1:

*Pt4/**Int1** (61-70, Male, Hospital): I think basically how long is the course for erm, on Warfarin. I mean, is it for the rest of my life or is it for just a few, a couple of weeks or a couple of months or what. You know, er basically that's it, that's what's my prime concern, how long am I going to be on it for.*

Extract 2:

Interviewer: Did you feel able to ask all of your questions?

*Pt4/**Int2** (61-70, Male, Hospital): Yes, yes, absolutely, absolutely.*

I: And the question you had before, er you said you wanted to ask how long you were going to be on the Warfarin,

Pt: Yes, yes.

I: did you get to ask?

Pt: No I forgot about it actually.

I: You forgot to ask.

Pt: But that, that'll obviously come as I attend the clinic on a more regular basis, you know. Erm, because obviously I mean he doesn't know because er, it all depends how my body reacts to the Warfarin. So you know, it could be weeks it could be, you know, I suppose it might last forever really. I don't know. Wait and see.

I: But you feel that you'd be able to ask that perhaps next time when you

Pt: No, no I wouldn't, I wouldn't say that I'd ask it next time. If it got to a longer period, say two or three months, then I might ask.

To summarise the above quotes, initially the patient stated that his 'prime concern' for the consultation was to find out how long he would be on warfarin. During the consultation he forgot to ask and once he realised this, he explained that the question was not very important and did not plan to definitely ask the question in future.

Patients felt that asking questions was central to their contribution in consultations and valued the ability to ask questions through consultations. Patients also felt that being provided with a distinct opportunity to ask questions was indispensible in a good consultation. This is particularly important for patients who have prepared questions in advance, as the data show that if they do not ask them during the consultation, they may never ask them. Few patients did however prepare questions in advance for a range of reasons but patients raised concern about forgetting to ask their questions and therefore the opportunity to contact the pharmacist after the consultation was beneficial.

5.5 Environment

The final section of this chapter will look at the impact of the environment on pharmacist-patient interactions. The environment of a consultation can include a large number of factors such as lighting, decoration, temperature, seating, noise, facilities and many more. The themes emerging from the patient interviews relate to two aspects of environment which are: the location, to include the main function of the room or area; and the use of information technology. Each will be considered in turn.

5.5.1 Location

One of the key themes to emerge from the patient interviews was the importance of location in ensuring that communication in a consultation was free-flowing and uninhibited. The location and environment of a consultation was raised in both interview one and two with many of the patients. Patients were not directly asked about this area in interview one and so the topic was raised through the patient's own conversation. During interview two the patients were explicitly asked about the environment of the consultation that had just taken place.

Four patients reported that they felt the availability of private consultation areas in community pharmacies was reassuring. Patients felt that the ability to talk to a pharmacist in private, when necessary, would enable them to feel relaxed about seeking advice and make the pharmacist seem approachable, which has also been found in American studies (Skomo, Desselle et al. 2008). One patient reported that the regular use of a consultation area for handing out repeat prescriptions provided frequent opportunities for asking questions and privacy when it was required:

> *Pt2/Int1 (51-60, Male, Community): Sometimes we go in the cubicle at the far end there. Takes you in there to dispense to you. If you've got any questions you ask him and he tells you in plain English what it is.... you go in there and you can tell him private things what's the matter with you.... nobody can hear you talking can they, so it's a lot better than being stood against the counter talking about private things.*

The issue of privacy is a key component of creating an ideal location for pharmacist-patient consultations (Pronk, Blom et al. 2002), particularly in community pharmacy where the alternative can be talking at the public counter. Research has shown that a private consultation area is popular with patients, with all 36 patients interviewed welcoming the idea of a consultation area, which supports the data shown here (Harper, Harding et al. 1998). Privacy was also one of the most commonly noted characteristics of the room in which pharmacist-patient consultations observed in this study took place. The importance of privacy within consultations for emergency hormonal contraception has also been reported (Bissell and Anderson 2003; Anderson and Blenkinsopp 2006).

Whilst some patients were positive about the provision of a private consultation area specifically in community pharmacy, three of these participants stated that they had not actually made use of such an area. Three barriers to the use of consultation areas were reported. Firstly a lack of awareness of private consultation areas prevented patients from making use of them. This was being tackled in some pharmacies by the use of posters and leaflets, as well as through media advertising. One participant clearly stated that he was not aware of any consultation areas within his regular pharmacy. It is possible that despite regulations governing the provision of consultation areas that the patient's pharmacy does not have this facility, however, it is also possible that the consultation area may not be easily identifiable by the public and if the room is not regularly used it could be possible that the patient was simply unaware of its existence. The importance of clearly signposting consultation areas has been raised previously (Anon 2002).

Secondly, one participant suggested that some patients may lack the confidence to request a private consultation. This issue could be reduced through the regular use of the consultation area as mentioned above. If pharmacists routinely provide advice from a consultation area, patients would not always need to ask to use this facility, or may have more confidence to do so if they have used the facility before.

The third barrier to using consultation areas in community pharmacies is explained by patient 10. She is an advocate of the provision of private consultation areas, as the first quote in this extract explains. However, as the discussion proceeds, she states that she has never made use of this service.

> *Pt10/Int1 (51-60, Female, Hospital): I mean certainly from the aspect of being able to approach your pharmacist cos I mean they've all got this little room now haven't they, whether or not it's used I don't know, it's there, so I would think it makes it look more approachable, makes them look more approachable so I should think yeah definitely, views must have changed.*
>
> *Interviewer: do you think that that would make a difference to how comfortable you felt talking to that pharmacist?*
>
> *Pt: it wouldn't make a difference to me, because I never go in the little room , I just talk to him regardless of who's there so it doesn't really matter to me but it might be for other people they might think it's better to go in the little room, it doesn't appeal to me*
>
> *I: why doesn't it appeal?*

> *Pt: well you're in a little room in the middle of a shop, behind a curtain, everybody's listening to what you're saying and if they twig that you're in the little room they're gonna listen aren't they, they're gonna think eh up you know who's this, it's a village, they're gonna twig who it is and then er, yes so it wouldn't really, no .... I've never seen anybody in the little room.*

In the first paragraph, patient 10 explains her support for consultation rooms, but in the second she says that she doesn't feel the need to make use of them as she is happy to speak to the pharmacist in public. However, when the conversation continues, patient 10 reveals that her main reason for not using the consultation area is in fact a concern that by doing so would make her consultation more, and not less, conspicuous. This is contributed to by the lack of routine use of the consultation area for standard consultations, as suggested by 'I've never seen anybody in the little room'. This is in contrast to the earlier example from patient 2, where utilising the consultation area is common and provides frequent opportunities for private discussions, without raising the interest of other customers. Research supports the low usage rates of consultation rooms described by patient 10. One Dutch study found that an average of 0.6 consultations per day were conducted in private consultation areas (Mobach 2008).

As mentioned above, it is now a legal requirement that community pharmacies in England have a private consultation area that permits the occupants to have a discussion that cannot be overheard from outside of the consultation area. During the transition phase while such rooms were introduced, some pharmacies made use of screens, curtains or barriers to segregate an area that sometimes did not result in audio privacy. However, even where a purpose-built room is available for consultations, anecdotal evidence suggests that most pharmacists do not use them for routine consultations for a variety of reasons, including accessibility, time, and convenience. Again anecdotal reports suggest that often consultation areas are only used for dispensing methadone or counselling on emergency hormonal contraception. An unforeseen and unintended consequence of such specific or irregular use is that when patients do make use of the consultation area, this could easily trigger interest from other customers. An alternative option for some consultations may be the use of acoustic barriers to separate areas of the counter. This may improve customer willingness to ask for a private consultation and could make integration of private consultations more achievable in routine interactions. A short extract from patient 14 adds to the ambiguity over the use of consultation areas:

> *Pt14/Int2 (70+, Female, Community): it doesn't bother me that it's a little stock-room.*

This patient's consultation took place in a relatively large consultation room in a community pharmacy; however, the room was also used for storage of weekly medication packs and consumables, and housed the fax machine. There was no sign to indicate that the room was available for patients to consult with the pharmacist. One part of the room was set up with a computer workstation and chairs, with plenty of space for a consultation to take place but the patient's perception indicates that the main use of the room could be interpreted in different ways.

The importance of the perception of an area's main use was also highlighted by a second patient. Patient 17 had a consultation with a pharmacist at the local GP surgery. In the extract below she explains the slight difference between previous pharmacist consultations and the consultation that was observed for the study, and the impact that this had on her.

> *Pt17/Int2 (51-60, Female, GP Surgery): Normally I see [pharmacist] in the other room, which is not a GP's consulting room, it's a larger room, it's usually where I see the physio in. I just feel, I don't know, yes erm and sort of a non-medical...A non-surgery setting.....I feel as if it's like more of a, of two people talking about the situation rather than one person talking to, at the other.... if you had a room that wasn't so clinical.*

The patient was struggling to pinpoint exactly what the difference was and what it meant to her. Ordinarily she had appointments with the pharmacist in a large room used for physiotherapy appointments but this session was held in a GP's consultation room. She explained that during an appointment to see the GP, there was often a shortage of time and this resulted in a more one-way discussion with less opportunity to challenge or discuss the advice received. In contrast, during routine appointments with the pharmacist she felt that the conversations were always two-way and felt far more able to participate in the consultation. By changing the location of the pharmacist's consultation, some of the feeling of a one-way discussion that usually happened in the GPs room remained with her and altered her confidence in participating. This example highlights the importance of establishing dedicated space for pharmacist-patient consultations and ensuring that the patient feels comfortable and at ease throughout.

The final comments relating to the primary use of a consulting room are drawn from the hospital data. The hospital clinic that was observed as part of this study is an extremely busy clinic treating hundreds of patients each day. As is often the case, space was at a premium and it was not uncommon for there to be a shortage of consulting rooms in which to counsel patients. As a result of this, two of the patients recruited to the study had their consultations conducted in the staff tea room. Both patients talked about the unusual location during their second interview when asked for their general thoughts about the consultation which indicates that it made a significant impression on the patients. For one patient, the location was of interest but did not affect the content of the consultation. For the second patient, the effects were more significant as he described that he felt distracted by all the different items around the room, including books and toys, as well as interruptions from staff. This patient felt that he had not been able to take everything in due to the distractions and this could potentially affect his care. The pharmacist was aware that the room was not ideal for conducting consultations but given the time and space pressures, had no choice but to continue. This example reinforces the importance of location for pharmacist-patient consultations.

The provision of a dedicated private consultation room or area is important to many patients to enable uninhibited communication during a patient-pharmacist consultation. Despite the widespread availability of such rooms, they may not be commonly used for consultations due to a number of barriers, for example, lack of patient awareness, a lack of regular use, poor patient perception or stigma surrounding their use. One study reported that prior to the introduction of full consultation rooms, the use of screened areas of the counter to provide privacy resulted in increased questions from patients and increased advice giving from pharmacists (Harper, Harding et al. 1998). However, current research supports the data presented here, suggesting low usage of consultation rooms and has found that consultation areas in Dutch pharmacies were only used for an average of 0.6 consultations per day (Mobach 2008). The study also found that provision of a dedicated area for consultations resulted in 9 times the number of consultations conducted in private, when compared to use of a pharmacist's regular office. The numbers involved were small but the findings support the data presented here, indicating the importance of dedicated consultation space. Further studies report that consultation areas are often squeezed into tight spaces and used for a range of functions including consultations and storage. The researchers reported that the lack of clarity of the function of the room can suggest that pharmacy staff are ambivalent about its use and therefore poor presentation of the consultation room hinders the promotion of professional consultations (Rapprt, Doel et al. 2009). Provision of a dedicated private consultation area may help to increase the provision of private consultations but patients may still be reluctant to utilise such facilities unless pharmacists encourage routine and regular use of consultation areas. In order to ensure that patients are fully able to participate in consultations work must be done to ensure the barriers arising from consultation location are reduced wherever possible.

5.5.2 Information Technology

A major influence on non verbal communication within medical consultations is the use of information technology. Information technology is routinely used in situations such as GP appointments and is becoming increasingly important within the NHS in order to provide access to patient information when needed at the point of care.

The use of computers was a theme that emerged from the patient interviews. There was a computer present in the consultation room used for all except two of the consultations observed during this study but the computer was not always switched on or in use during the consultation. Patient comments were related to both prior interactions and the consultation observed during the study. Six patients discussed the use of computers and all were accepting of their use during a consultation and felt that this did not negatively impact upon the consultation. Research from the medical literature also shows that patients are accepting of computer use within health care consultations (Ridsdale and Hudd 1994; Hsu, Huang et al. 2005). Increasing personal experience of using computers positively influenced patients' acceptance of IT within the consultation.

Patient 5 explained his understanding of the importance of accessing information via a computer. He is aware that if the pharmacist is looking at the computer, they cannot maintain eye contact with him at all times, however, this is an acceptable interference with normal body language due to the benefits he perceives.

> *Pt5/Int2 (70+, Male, Hospital): So if somebody is sitting there talking to me and looking at the screen I know that information which is appertaining to what we're talking about. So that wouldn't bother me....... I could see that some people would think well he's not looking at me, is he listening to me whereas in actual fact if he's looking at the screen he's looking at your information. So he's got more in front of him there then he could ever find by looking straight in your face.*

This extract suggests that despite an awareness of interrupted eye contact, the patient feels that the use of the computer enables the pharmacist to access all available patient records and is therefore able to conduct a better informed consultation.

Other patients were more positive about the direct patient benefit of the inclusion of computers within the consultation and patient 16 reported that the pharmacist's use of the computer helped to increase her understanding of her medicines. By utilising the PMR in conjunction with the patient's own medication, the information and advice provided by the pharmacist was reinforced to this patient and helped to remember everything. This has also been reported in the medical literature where the computers have been used as a collaborative tool during consultations (Greatbatch, Heath et al. 1995).

Pharmacist-led consultations did not always involve the use of a computer. In those consultations that did, patients were accepting of the use computers due to the benefits that could be provided to the pharmacist in terms of information access, or directly to the patient themselves. The data suggest that patients may place high value on the information available via computers but the importance of maintaining eye contact, and maximising non verbal communication with the patient can enable pharmacists, or other healthcare professionals, to access information that the patient has not discussed previously (Silverman, Kurtz et al. 2005). Non verbal cues from patients can be missed if eye contact is not present which can result in missed information from the patient. The importance of IT within medical consultations should not be underestimated but practitioners must be able to balance their use of these facilities within patient interactions.

5.6 Summary

The data presented in this chapter show that there is still confusion amongst patients of the role of the pharmacist and the services that they can provide. Patients reported that they expect a range of services from their pharmacist; the most common expectation was that pharmacists should be knowledgeable about medicines and be able to pass that information on to their patients. Patients also stated their expectation of a friendly and personable pharmacist with whom it was easy to communicate. Many patients expect a good level of dispensing service from their community pharmacist which suggests that this keystone of community pharmacy remains an identifiable pharmacy service.

One of the main themes to emerge from the patient interviews was the importance of building relationships with local pharmacists. Patients reported that building relationships provided more opportunities for social, non-medical conversations and this was highly valued by patients. The role of social conversation will be considered in more detail in chapter 6. Stronger relationships with pharmacists were linked to an increased confidence in asking questions and seeking advice, and an improved continuity of care that furnished pharmacists with accurate information, enabling high quality and tailored patient care. When consulting a pharmacist for the first time, patients reported that an initial rapport could compensate for the lack of past relationship and being able to relate to a pharmacist was seen to be essential for all except one patient.

A key element of pharmacist-patient relationships was found to be trust. Trust could be built up over time and was influenced by a number of factors, including pharmacist confidence, attire, eye contact and treating the patient as an individual. Trust in the pharmacist was important to the patients interviewed and echoes comments from the pharmacists explored in chapter 4. The literature shows strong links between trust and relationships, and the communication skills that reinforce pharmacist-patient relationships. The data show that establishing trust with a patient may be fundamental for ensuring successful treatment.

Patient participation in a consultation is essential if the patient is to receive the maximum benefit from the interaction. Patients reported that the atmosphere of the consultation strongly affected their propensity to participate and that a relaxed and friendly atmosphere made it easier to join in. An individualised consultation made the patient feel valued and so tailoring of the consultation to each patient is an important skill for pharmacists to practise. For patients, one of the most prominent and identifiable aspects of their communication was asking questions. Patients valued the chance to ask questions throughout the consultation but it was important to be given a distinct opportunity to ask questions at the end. Patients were concerned about forgetting questions and the data show that this does occur. Providing an easy means of contact post-consultation helped patients to feel at ease about asking questions in future, however, not all patients would seek to ask specific questions that they had planned to ask but that were forgotten during the consultation.

The location of consultations was important to the patients interviewed in this study. Privacy was reported to be important to enable open communication. The use of the room or area had significant influence on patient perception. Patients expressed concern that other people could become intrigued about their consultation if they speak to the pharmacist in a consultation room, and that room is not used regularly, or is used only for certain types of consultation. This unintended consequence of the infrequent use of consultation areas could result in embarrassment for patients and discourage them from asking for private consultations. This may consequently prevent patients from seeking information or advice from pharmacists which opposes the intended influence of providing private consultation rooms. In addition, if consultation areas were used for multiple purposes such as storage, patients had a more negative perception of the location and could be distracted from their consultation. Creating a welcoming and dedicated consultation space that has routine and regular use may help to reduce some of the barriers that location can place on pharmacist-patient communication.

Finally the use of computers within consultations was discussed during the patient interviews. The patients were accepting of the use of computers and reported benefits both to the pharmacist, and directly to the patient. The use of IT within healthcare consultations is widespread and can have a large range of benefits; however, practitioners must remain alert to non-verbal communication that can be hindered by inappropriate, or poorly managed, use of computers or other technology within consultations.

The next chapter will present analysis of the audio recorded consultation data.

Chapter 6. Pharmacist – Patient Consultations

As outlined in the literature review, research studying pharmacist – patient consultations has rarely included detailed analysis of recorded consultations and has instead relied on proxy measures for communication, such as patient satisfaction, or changes in patient outcome. Whilst these are important in building up an evidence base surrounding pharmacist led consultations, it is also essential that the communication processes that occur within consultations are directly analysed. Some studies have utilised video or audio recordings of consultations but the analysis has primarily been quantitative and aimed to categorise the communication in order to explore the data (Hargie, Morrow et al. 2000). Few studies have used qualitative methods to explore communication directly.

This chapter will present data drawn from analysis of the audio recordings of eighteen pharmacist-patient consultations which were conducted in hospital, community pharmacy or primary care settings. The data presented were collected during consultations led by five different pharmacists as shown in Table 6.1 below. The small number of consultations collected for some pharmacists may influence the results, for example the large proportion of consultations for pharmacist 4 could mean that communication skills consistently displayed by pharmacist 4 will have a larger influence on the results than those for other pharmacists. The results presented here should be viewed as a foundation upon which to build future research and are not representative of a wider population. Non-participant observational notes were used during analysis to help in drawing out key themes and understanding the recordings in the context of the consultation.

Table 6.1 Number of Consultations Recorded Per Pharmacist

Pharmacist Number	Number of Consultations
1	2
4	10
5	4
9	1
11	1

Analysis of the consultations followed two paths and each is presented in this chapter. The first section will report themes to emerge from analysis of the consultation data based in grounded theory as described in chapter 3. The second explores the application of the Calgary-Cambridge Guides to the Consultation to the consultation data.

6.1 Communication within Pharmacist-Patient Consultations

This section will explore two of the main themes to emerge from analysis of the consultations which are the pharmacists' use of guides or structures; and the use of information technology within the consultation. Other themes to emerge from the data included patients' discussion of a desire to reduce the number of medicines taken and discussion of the patient's family with relation to health. These themes will not be explored in this thesis.

6.1.1 Consultation Structure

In order to make the communication within a consultation easier for the patient to follow, the pharmacists used a range of methods to add structure to the consultation and allow time to focus on other aspects of the consultation.

One way of providing structure is to make use of a predefined guide or template. This was demonstrated by two of the community pharmacists in this study. Pharmacist 1 made use of an official computerised form used to document MURs whilst pharmacist 11 used a paper version of the same form. The third community pharmacist to be observed made reference to the forms within the consultation but instead used a combination of the patient medication record (PMR) held at the pharmacy, and bullet point notes pre-written on post it notes.

The extent of the involvement of guides within the consultation varied considerably and the first consultations to be considered are from pharmacist 1. Pharmacist 1 used a computerised form to structure his MUR consultations and the role of the form in guiding the communication was overt throughout the consultation. As the pharmacist began the consultation, he explained the nature of the appointment and made clear to the patient that they would be following the computer form as shown in the extract below.

> *Ph1/Pt2 (Community):*
>
> > *Ph: OK so I'll just log you in and then (pause) there we are.... So we go through this step by step. Go through a few of your patient details to start with (Pt name) and then we'll look at each drug individually that you're taking. And at the end we may or we may or may not give you an action plan, it depends. So if we find anything that we need to say, 'Well this needs changing' or whatever, we'll then put it on an action plan at the very, very end.*

As this quote demonstrates, the use of the guide provided a clear and organised structure to the consultation and ensured that the appointment followed a logical sequence. The use of strict protocols has previously been explored within NHS Direct which is a UK 24 hour nurse-led call centre for health advice and information (Greatbatch, Hanlon et al. 2005). There were however some complications from adhering so rigidly to an official form as patient queries could not always be fully dealt with as the consultation was not at the correct stage of the form to record the details. This will be covered in more detail in the next section which looks specifically at the use of computers in the consultation.

Pharmacist 11 made use of a similar form to guide his consultations; however he used a paper version. As the consultation began, Pharmacist 11 too introduced the form as a part of the consultation and completed initial short answer questions according to the order on the form. However, as the consultation progressed, the communication only loosely followed the order of the form and the pharmacist was able to move freely between topics whilst noting pertinent information on the form. Use of a guide in this way again afforded a logical sequence to the consultation but allowed for the consultation to evolve in accordance with the needs of the patient. Research investigating the use of paper based forms in nursing consultations has explored the extent to which nurses adhere to given templates (Jones 2009). The study found that some nurses used the template as a guide that mapped the interaction, but the order of topics to be discussed, and questioning style, were moulded to the individual situation. This supports the way in which pharmacist 11 utilised the paper based MUR form. However, some nurses structured the interaction to follow the overall shape of the template giving the template a large role in controlling the structure of the consultation which is more aligned with the use of a computerised MUR form by pharmacist 1.

Pharmacist 5 was again conducting MUR consultations in community pharmacy but made use of a different template to structure his consultations. Pharmacist 5 prepared for each appointment by reviewing the PMR and making bullet point reminders on post-it notes. He used these reminders within the consultation in order to steer the conversation to the topics he needed to cover, but did not follow the notes in any particular order. In addition he made further use of the PMR on the computer during the appointment to serve as a list of the patient's medications, so that each was discussed in turn and none were missed out as demonstrated below.

Ph5/Pt13 (Community):

> *Ph: Now then, you take 1,2,3,4,5,6,7,8,9,10, all these tablets mostly on a regular basis so we'll go through each one, see that you're still taking them, OK? ...... Right, OK. OK let's start at the top,*

The single page list of medicines was available for the patient to see which helped to make the structure of the consultation clear to the patient. It was reported in chapter 5 that patients were sometimes hesitant in asking questions in case they were interrupting the pharmacist, and mentioning something that would have been covered later in the consultation. Use of the computer in this way may enable the patient to structure their own participation in the consultation facilitating communication.

Pharmacist 4 did not use a formalised guide but instead followed a mental checklist throughout the consultations. In most consultations this was not made overt in the spoken communication, but the pharmacist could occasionally be seen to be thinking of the next item to cover by counting on his fingers, and frequently began a new section with ‘Err’ indicating that he was thinking of the next section of information. As multiple consultations with this pharmacist were recorded, it can be seen that most topics for explanation to the patient were covered in the same order, with variation according to patient input. This repetition would facilitate the pharmacist’s recall of topics according to his mental checklist. Occasionally this process was made clear during the conversation as shown below.

> *Ph4/Pt4 (Hospital):*
>
> *Ph: so erm, gone through that, gone through about the tablet numbers…*

Pharmacist 4’s use of a mental checklist during consultations was supported by explanations during his interview and the extract below shows how he views the use of a checklist.

> *Ph4/Int1 (11yrs qualified; hospital; male): I think it’s ingrained now because I’ve been doing it for quite a long time.... I think about the, the way, the order that I’m going to tell people the information, you know, all the stuff that I need to get across.... so it’s almost sort of automatic now cos you sort of know, right, ‘You need to know’, then you’ve got to tell them this, this, this and this.*

By making use of a mental checklist rather than a formal guide, the pharmacist was able to be completely flexible within the consultation and accommodate patient questions and input whilst still ensuring that all the required information was covered. This strategy for structuring a consultation is only made possible due to the recurrent nature of the consultations, and the pharmacist’s experience at conducting them.

The consultations discussed so far all had a clear purpose or goal which made it possible for the pharmacist to plan or follow predefined forms. This was not possible for pharmacist 9 in primary care who did not know the exact purpose prior to the consultations. No identifiable method for structuring the consultation emerged from this pharmacist's data, but only one consultation was recorded and observation of further sessions may have enabled identification of structuring methods. During the interviews, pharmacist 9 said that he would like to have more overt methods of structuring consultations, for example the mnemonics that GP registrars utilise and this view is also reported in the literature (Cleland, Bailey et al. 2007).

Another way of adding structure to a consultation was for the pharmacist to make use of practised or rehearsed sections of text. The use of this type of speech fragments enabled the pharmacist to perfect an explanation over time, and to determine which ways work best for them and their patients. Using sections of scripted explanations does not mean that the consultation is not tailored to the individual patient, as the pharmacist still has to select if and when to draw on these resources. It may not be a conscious decision to re-use the same description, but if a pharmacist is conducting multiple consultations covering similar topics, then familiarity will allow the pharmacist to build up knowledge of good ways to communicate particular items to their patients. It was only possible to see this type of structuring in pharmacists that had multiple consultations observed in the study, namely pharmacists 4 and 5. It is interesting to note that both of these pharmacists did demonstrate multiple uses of these scripted speech fragments, which suggests that further research may discover common use of repetition within particular consultation types. Drew and Heritage have discussed the development of routines within institutional work settings such as healthcare interaction (Drew and Heritage 1992). The building up of a 'fingerprint' defining the interaction within specific formal contexts occurs in many professions including education, law and health care. Drew and Heritage suggest that these fingerprints help to define and guide interactions as demonstrated in the use of repeated dialogue by the pharmacists in this study.

Pharmacist 4 conducted warfarin clinic consultations with patients newly starting on warfarin. This was a routine part of his job and he conducted multiple consultations each week. The warfarin consultations are required due to the large amount of information that needs to be given to any new patient starting on warfarin, and it is important that each patient receives all of this essential information. The consultations were varied by the specific context surrounding each patient and the patient's influence on the consultation, but the information to be given remained constant. This level of repetition in any communication is likely to result in the development of common phrases and multiple examples of this were found throughout the consultations. One example of this repetition is shown below.

> *Ph4/Pt5 (Hospital):*
>
> *Ph: it says on the video there's four strengths but we just use 3 milligram tablets and we dose you in tablet numbers.*
>
> *Ph4/Pt7 (Hospital):*
>
> *Ph: we use one strength of Warfarin tablets er, the video said there's four different strengths, we generally use 3 milligram tablets and we dose in tablet numbers.*
>
> *Ph4/Pt8 (Hospital):*
>
> *Ph: on the video it says there's four different strengths, we just use one strength. We use 3 milligram tablets, they're blue and we give you the dose in tablet numbers.*
>
> *Ph4/Pt11 (Hospital):*
>
> *Ph: If you watch the video it says there's different strengths, we only use one strength here, we use blue 3 milligram tablets and we dose you in tablet numbers.*

This pharmacist has found a concise and easily understood way to explain about the dosing system used within the clinic, and the same pattern was seen with other explanations throughout all of the consultations observed for Pharmacist 4, and occurred again in the data for Pharmacist 5. The use of this mechanism for improving the communication within a consultation was not limited to providing explanations, and Pharmacist 5 also made use of the technique in building rapport and relationships with his patients. Pharmacist 5 was observed conducting MURs in community pharmacy and a requirement of the MUR process is that the patient must regularly use the same pharmacy. This meant that Pharmacist 5 had built up a relationship with each of the patients prior to the consultations taking place. All of the patients recruited by Pharmacist 5 had been using his pharmacy for many years and reported having a good relationship with the pharmacist during the patient interviews. It is interesting to note then, that the topic for scripted fragments of the consultation used in building rapport was the name of the pharmacist as shown below:

Ph5/Pt15 (Community):

Ph: You've been coming here a long time Mr (X)

Pt: Yes.

Ph: but you don't know my name. Do you?

Pt: Well Mr (pharmacy name) as far as I know.

Ph: OK. (Laughs) You can call me that, or you can call me (Y).

Pt: (Y).

Ph: Whichever, whichever you find easier.

Ph5/Pt13 (Community):

Ph: Now we've known each other for a long time,

Pt: Ahuh.

Ph: I bet you don't know my name?

Pt: I don't, I just call you Mr (pharmacy name), that's what I was telling this lady. I don't know your name.

Ph: I'll tell you what, I'll make it even easier for you and you can call me (Y), which is my first

Pt: No, no, I couldn't even remember that, I wouldn't remember that.

Ph: You want to call me Mr (pharmacy name) that's fine. It's not a problem.

Ph5/Pt16 (Community):

> *Ph: if there is anything that bothers you about your medicines do let me know.*
>
> ***Pt: Right.***
>
> *Ph: But I think you know that.*
>
> ***Pt: Yes.***
>
> *Ph: But I don't think you know my name.*
>
> ***Pt: I know it's (Y), is it?***
>
> *Ph: Oh right, OK. (Laughs) You do know my name.*
>
> ***Pt: Well my best friend, her son knows you from....***

These three extracts from Pharmacist 5 are of particular interest due to their subject. Whilst it is easy to understand how routine explanations can become rehearsed and practised, communication related specifically to building rapport would be more likely to vary according to the particular pharmacist-patient relationship. However, the data suggest that Pharmacist 5 has identified a topic not related to a patient's medicines, which is common to many of his patients. He understands that many of his patients are unsure of his name, or may find it difficult to remember and perhaps in order to avoid embarrassment or awkwardness for the patient, he tackles this in a friendly manner and uses the topic to build rapport with the patient. This also ensures that patients know how to address him for the rest of the consultation, and in future. By offering his first name to the patients, a more relaxed tone is set for the consultation and the data presented in chapter 5 show that patients value this informal atmosphere and feel more able to communicate.

The desire of pharmacists in this study to find ways of structuring consultations has been echoed in the literature (Cleland, Bailey et al. 2007) and there are many ways of developing structures. The role of routines in healthcare organisations has been discussed with regard to collaborative working (Greenhalgh 2008) however many of the principles apply to an individual consultation. A routine is described as recurrent behaviour patterns, which, by allowing decisions to be made at a subconscious level, enable the individual to conserve cognitive function for non-routine activities. Routines can reduce uncertainty and facilitate a range of tasks as long as routines are positive and open to change. This theory supports the use of rehearsed fragment of text described in the data presented above, but reinforces the need for review and an awareness of such routines. Despite research supporting strict adherence to defined structures in pharmacy communication (Watson, Hart et al. 2008) the potential risks of relying too heavily on routines are discussed by Banks et al (Banks, Shaw et al. 2007) with particular regard to rigid protocols and mnemonics. The use of such confined structure can meet with resistance from patients and can in fact undermine the complexity of the communication that occurs in the pharmacy context. Formal protocols and guides such as those used in this study are widespread within healthcare and pharmacist's use of guidelines and care plans has been reported with mixed results (Puumalainen, Kansanaho et al. 2005; Phelan, Blenkinsopp et al. 2008; Fraser, Fraser et al. 2009; Weiss, Booth et al. 2010). A study of pharmacists' use of checklists within consultations for EHC found that for 15 of a total 41 consultations, the checklist was a barrier to communication (Weiss, Booth et al. 2010). Fraser et al. report that study pharmacists felt the guides provided for consultations were too restrictive and time consuming during completion, and offered the researchers a range of suggestions for improvements. However, the study found that use of care plans and protocols was beneficial to consultations if time is taken to ensure they are locally appropriate (Fraser, Fraser et al. 2009). A wealth of evidence-based care-plans and protocols are available (Swinglehurst 2005) and ensuring that such guides are fit for purpose and relevant to local needs is essential. The authors of the Calgary-Cambridge Guide suggest that practitioners aim to conduct an ordered but flexible consultation, and any of the methods used by pharmacists in this study could achieve this.

Some of the difficulty that pharmacists experience in the uptake of guides or protocols into consultations may be explained by the division of content and process skills during communication skills training (Kurtz, Silverman et al. 2003). Traditional models of consultations focus on the information to be gathered or given - the content. Communication skills courses are then used to develop the practitioners' skills of managing the consultation – the process. When these aspects are taught separately, it can be difficult for students or practitioners to integrate them during consultations. In addition, traditional models of consultations often exclude the patients' perspective and as such this topic is taught in conjunction with process skills which can lead to confusion over the classification of this area. The patient’s perspective forms a crucial part of the content of any consultation but separation from other content teaching can mean that this area is not given the same significance by learners as other areas such as history taking (Kurtz, Silverman et al. 2003; von Fragstein, Silverman et al. 2008). Helping students and qualified practitioners to combine these two aspects of consultations allows the focus to pass onto the patient away from the consultation itself. It is important to remember that it is not always possible to give equal attention to each aspect of the consultation. For example, in a new clinical area, the practitioner would need to focus on the content of the consultation to ensure that the patient receives the correct care. However, when the practitioner is familiar with the clinical area but faced with a complex situation such as an interpreter, an emotional patient or diffusing tension it would be the consultation process skills that are prioritised. The ability to manage all consultation skills successfully requires the practitioner to view them as a single set, with varying emphasis, and in this way the uptake of guides or protocols may be eased. If pharmacists are able to utilise protocols to support their process oriented consultation skills, whilst maintaining sufficient focus on the content, in particular the patient’s perspective, they may be able to use them flexibly and with an awareness of their limitations.

The literature reported here supports the use of structures, routines and protocols but they should be combined with an awareness of their limitations and an openness to change.

In summary, the data show that the pharmacists observed in this study made use of a variety of methods for structuring their consultations, including official computerised or paper based forms, rehearsed segments of speech, PMR records, brief written notes and mental checklists. These methods had a range of advantages and disadvantages for pharmacist-led consultations and the data suggest that pharmacists must pay careful attention to the methods that they use to structure their consultations to ensure that they meet the needs of both the pharmacist and the patient.

The next section in this chapter will look in more detail at the use of computers within pharmacist-led consultations.

6.1.2 Information Technology within the Consultation

The second theme to emerge from the consultation data was the varied use of information technology within the consultations. A computer was available in 16 of the 18 consultations observed during the study, but it was not used in all 16 of these consultations. Where computers were used, they served to both enhance and detract from the consultations at different times. As discussed above, information accessed via a computer was used to help structure consultations by two of the pharmacists with varying impact on the communication, however computers performed a range of functions within the consultations.

Information technology can be an incredibly useful tool when used appropriately but can lead to difficulties in consultations if not well managed (Delaney, Fitzmaurice et al. 1999). Many patients are familiar with the use of computers during medical consultations, for example GP appointments, and the data presented in chapter five suggests that patients are generally supportive of their use. This is supported by findings in the medical literature (Ridsdale and Hudd 1994; Hsu, Huang et al. 2005). The impact of IT on communication within a consultation can vary enormously and practitioners are able to minimise this impact by the discreet and careful use of computers so as not to interrupt dialogue or damage rapport (Greatbatch, Heath et al. 1995).

This was the case in some of the observed consultations where pharmacists were able to conduct their appointments and make use of the computer for essential tasks only. However, in some consultations, the use of IT was overt and controlling over the progress of the consultation. This produced both positive and negative effects on communication and each will be explored here.

The first extract to be given in this section demonstrates one extreme of the use of computers. In this section of the consultation, the communication is completely focussed around the options presented by the programme in use on the computer. Whilst this does provide a structure to the consultation, this level of adherence to the programme leaves no room for patient involvement, and arguably little room for pharmacist involvement.

> *Ph1/Pt1 (Community):*
>
> > *Ph: so I've got to do these with you,*
> >
> > ***Pt: Yes.***
> >
> > *Ph: we've got to tick them off.*
> >
> > ***Pt: Yes.***
> >
> > *Ph: So patient has received information and consented to review?*
> >
> > ***Pt: Yes.***
> >
> > *Ph: Yeah, OK. Patient has agreed that information may be shared with the GP?*
> >
> > ***Pt: Yes.***
> >
> > *Ph: Yes. And patient has agreed that information may be shared with others, such as carers. Now I always say here is it all right if we put practice nurse in?*
> >
> > ***Pt: Yeah.***
> >
> > *Ph: Is that all right?*
> >
> > ***Pt: Yeah. There's nobody else, yeah, yeah.***
> >
> > *Ph: Tick. (Pause) There we go.*
> >
> > ***Pt: Yeah.***
> >
> > *Ph: So we'll move on to the next one. Right, so this is your annual review which I've just talked to you about,*
> >
> > ***Pt: Yes.***
> >
> > *Ph: Pharmacist identified because we asked you to come in.*
> >
> > ***Pt: Yes.***

The first line of this extract suggests the lack of room for tailoring the consultation that the pharmacist perceives at this stage as he says 'I've got to do these with you'. This was in reference to the computer programme progressing page by page and required certain information to be present before moving to the next section. The explanation given to the patient deflects responsibility for the questions by explaining that the pharmacist has no choice but to ask. This has also been discussed in studies examining the use of protocols in NHS Direct which found that nurses used such deflection as a way of asserting their professionalism when faced with questions that they would not have asked when using their experience and knowledge to guide that particular interaction (Greatbatch, Hanlon et al. 2005). Later stages in this consultation became less rigidly aligned to computer based questions but there was a strong influence throughout. Not only did the programme influence the overarching structure of the consultation, but also the phrasing of questions used by the pharmacist. For example, if there was a yes or no tick box on the computer, the pharmacist often read the title using only tone of voice to indicate that it was a question. This was a combination of thinking out loud whilst completing the form, and being overly led by the programme terminology. Occasionally slight confusion resulted as patients found it more difficult to understand these abridged questions rather than the pharmacist's usual questioning style, but, importantly, it reduced the possibility for building rapport as the pharmacist was not adapting communication in response to the individual patient.

A further example of a negative impact of IT on rapport within the consultation is shown in the extract below, which is taken from the beginning of a consultation with pharmacist 4. The patient and the researcher were already in the room from conducting the patient interview. The pharmacist joined the room but there was no formal beginning to the consultation. This was in contrast to all of the other nine consultations observed for this pharmacist. The pharmacist sat at the desk and began working on the computer and there was silence in the room. Observational notes report that this was an awkward time and the silence lasted a long time. The approximate times in the extract show that it was 4 minutes 35 seconds before the consultation began in earnest.

Ph4/Pt6 (Hospital):

> *Ph: (Typing) [1m04s] Just get into your record. (Pause) [1m39s] Just get that up so I know what I'm doing with*
>
> ***Pt: Ahuh.***
>
> *Ph: erm. (Pause) [1m52s] Right, so what, you're on Warfarin for three months?*

The pharmacist made some attempt to explain what he was doing but this did little to repair the situation, and the patient's views regarding this situation confirm that it was an awkward and difficult start to the consultation. As the consultation continued, the patient felt that communication improved and rapport was built through the pharmacist tailoring the consultation specifically to the patient and the use of clear explanations. However, the impact of the initial moments of the consultation had a lasting impact on the patient as she wanted to discuss the opening of the consultation in detail in the follow up interview. The patient's thoughts are explored in more detail in chapter five. Pharmacist 4 did not use a computer in all of his consultations, even when one was available. Notes made by the researcher during observations state that there was an increase in the amount of eye contact made by the pharmacist during consultations that did not involve a computer. When the computer was in use, and displaying patient information the pharmacist repeatedly looked at the screen, even when not using it. This meant there was less time available for meeting the patient's eye contact. This did not appear to be a conscious decision, but rather that having a source of information other than the patient provided a second point of focus for eye contact. The patients in this study reported mixed views on the importance of eye contact but all were happy with the level of eye contact experienced during their consultation. Therefore, it may not be disadvantageous to have the second focus for eye contact.

The use of computers affected more than the general rapport of consultations, and there were multiple examples showing that the pharmacist's attention was focussed on the computer rather than the patient. This occurred in a range of situations including, if the pharmacist was unfamiliar with the programme, when there were problems with the computer systems, or the pharmacist was unfamiliar with the patient's previous information in sufficient detail. In these instances the effect on communication was more temporary and dialogue resumed rapidly once the computer issue had been dealt with. One example from pharmacist 5 is shown here.

> *Ph5/Pt16 (Community):*
>
> > ***Pt: Now you can tell me what actually that does because I really don't know and I know it's a, I mean I don't know why I have to take it.***
> >
> > *Ph: OK, in your case you see the reason we're (pause) sorry, just making sure that er, just want to make sure I've got it in the order I've got it on there.*

In this case the pharmacist starts to answer the patient's question but pauses half way through. Once he realises that he has been distracted, he explains that he is confirming the order of the patient's tablet boxes with the order of medicines on the patient's PMR. The consultation proceeds by both parties first dealing with the arrangement of the tablets and then returning to the patient's question. It was important that the pharmacist was able to maintain structure in the consultation and completing this task facilitated the smooth running of the consultation. However, the distraction of the computer meant that the pharmacist was not able to effectively communicate this to the patient, and the temporary difficulty in communication occurred.

A final example of the negative impact of IT on one of the consultations has greater effects than damaging rapport. By using a computerised form to conduct an MUR, pharmacist 1 is limited to a certain number of letters when filling in particular information. This results in him not being able to put all the required information onto the MUR record which is sent to the GP in addition to forming part of the pharmacy records for the patient. This is shown in the extract below:

> *Ph1/Pt1 (community):*
>
> > *Ph: so I'm going to put it in as arterial, arterial disorder because there's nothing there on the, we can't (pause). Ah, will it let me have any more? No it won't.*
> >
> > ***Pt: No, no.***
> >
> > *Ph: It won't but I'll tell you what, we'll take that one out because I think your diabetes is more important.*

This extract illustrates the impact that computerised forms can have. The pharmacist is not able to record all of the patient's medical history due to insufficient space and has to leave out the patient's high cholesterol. This omission may not have a significant impact on patient care, but if the MUR form was used to update pharmacy records, it is possible that one of the patient's medical conditions would be missed and this may have significant effects on future treatment. In addition this quote highlights the problem that dealing with official programmes can have when selecting items from a fixed list. The pharmacist is unable to enter his preferred category for the patient's medical condition as it is not available on the system and opts for arterial disorder. Although this may be a note for manufacturers of the programme, it does impact upon the communication within the consultation as the pharmacist has to explain why there are difficulties in completing the form.

Difficulties with using protocols and rule-based systems have been reported with NHS Direct which was discussed earlier. Nurses are required to follow complex algorithms to triage patients, but research has shown that the nurses commonly altered both the questions prompted by the system, and the advice offered. Adaptations took many forms including personalising the information, placing different importance on the information provided, or providing alternative information. The system is designed to be strictly adhered to in order to ensure standardised responses for patients, but research shows that the interaction is shaped by the professional knowledge and skills of the nurse, and by the patient's input into the consultation (Greatbatch, Hanlon et al. 2005). The limitations imposed by the rigid protocol do not fit every situation and the nurses amend the protocol to fit the context. This supports the data presented here which show the difficulties faced by the restrictions of a national protocol such as that for MURs. Although not related to computerised protocols, a Scottish study found that pharmacists felt a national standardised care plan should be adapted to fit local requirements and provide more space for full answers rather than tick-box answers and again supports the data presented here (Fraser, Fraser et al. 2009). It has also been found that nurses reduce complex patient answers to a few simple words in order to complete a paper based template for the interaction (Jones 2009). This suggests that detail provided by the patient is not always captured and highlights the importance of flexibility within any template or protocol.

Although there were a number of difficulties during consultations as a result of IT, there were also examples of where using a computer enhanced the consultation process. The first example is again that of rapport. In the following example there were problems with the computer system on the day of the consultation and the pharmacist was having difficulty logging in. Although this disrupted the flow of the consultation, the ensuing pause in proceedings provided an opportunity for the pharmacist and patient to chat about non-medical matters and to build rapport at the beginning of the consultation. This helped in facilitating the rest of the session.

> *Ph4/Pt10 (Hospital):*
>
> > *Ph: This, this was slow yesterday. (Pause) Some of the computers are slower than others.*
> >
> > ***Pt: Yes.***
> >
> > *Ph: The erm, it's to do with the IT apparently, we found this out the other day, the IT infrastructure in this block is something out of the Flintstone era.*
> >
> > ***Pt: (Laughs)***
> >
> > *Ph: everywhere else is good except this block.*

In this example, the pharmacist shares a clear explanation with the patient regarding the delay in using the computer. The discussion continued with both the pharmacist and patient sharing problems with computers and finding common ground on which to build rapport.

Completing a computerised form also served to provide timely summaries of the acquired information. As the pharmacist completed each section of the form, they clarified the information that would be entered, confirming with the patient that it was an accurate representation of their discussion. The same function can be served by paper-based forms but this is a useful example to reinforce that using notes or computers can enhance a consultation in more ways than just provision of information.

A more unusual example of a way in which IT enhanced a consultation is found in the data from pharmacist 9. This was a consultation conducted in primary care at a GP surgery. The pharmacist was providing treatment for the patient's hypertension and during the course of the discussion the patient said that she would like to have her GPs opinion on the treatment recommended by the pharmacist. The pharmacist's actions are outlined to the patient in the extract below.

> *Ph9/Pt17 (GP Surgery):*
>
> > *Ph: OK I'll see if I can get her attention with an instant message. I'll flag it as urgent..... Right, I've sent her an instant message asking her opinion on that just to*
> >
> > ***Pt: Ahuh.***
> >
> > *Ph: to confirm so it will take her a few moments to come back to us.*

In order to obtain a response before the patient's appointment was over would often be difficult if the GP was also conducting patient consultations. The surgery made use of an instant messaging system which enabled the pharmacist to send a message to the GP from the computer within the consultation room. The GP was then able to receive and respond to the message in between patient consultations. The result was that no patient consultations were interrupted and the pharmacist did not have to leave the patient alone, or ask her to wait for a response. The patient's concerns were dealt with efficiently due to the IT facilities available.

Little research has been conducted into the use of computers within pharmacy based consultations and so literature from medical consultations has been drawn on here. In the USA, the use of computers within medical consultations is much less widespread than in the UK and has been the source of much discussion with extensive research in both the USA and UK. It has been reported that patients are accepting of computer use within consultations and that patient satisfaction with consultations is not negatively affected (Ridsdale and Hudd 1994; Hsu, Huang et al. 2005). One qualitative study used ethnographic methods in order to establish the effects of utilising electronic health records on the human aspects of the consultation. The study found that computers affected consultations in a range of ways including spatial and relational effects (Ventres, Kooienga et al.

2006). Spatial influences relate to the physical presence of the computer, for example positioning of the screen and ability to type without interrupting the consultations. Relational aspects considered customisation of the software to individual patients and ease of switching intensity of computer use to accommodate patients with more complex or emotional problems. These issues are echoed in the pharmacist-patient consultations and suggest that similar issues arise in doctor and pharmacist consultations with regard to computer use.

The efficiency of computerised forms over paper equivalents has been explored in an American study which found that computerised forms were more complete i.e. more information documented, and faster to retrieve than paper versions (Tsai and Bond 2008). The preference of pharmacist one for computerised forms over paper based forms supports the literature suggesting the more detailed completion of electronic protocols; but with data from just one pharmacist in this area it is not possible to draw further conclusions.

A large amount of research was conducted in the UK at the uptake of computers in primary care and this explores issues arising at the inception of computer involvement in consultations. As the role of clinic – style consultations for pharmacists is new, the results are largely applicable. One study using conversation analysis presents many findings in support of the data shown here (Greatbatch, Heath et al. 1995). GPs were found to pause in the middle of utterances or abruptly change topics in order to attend to the computer, and confine visual attention to computer monitors. However, it was not just GP communication that was affected as patients tried hard to tailor their response to reduce interruption of typing. It was noted that the greater the success of the doctor at keeping computer use in the background of the consultation, the less patient communication was affected. The study also reported collaborative use of computers, such as sharing the screen to utilise information, during consultations which also emerged from the data presented here. In further research, computers were found to restrict the doctors input to a limited set of options and to physically limit the orientation of the doctor towards the patient (Makoul, Curry et al. 2001). Both Makoul and Greatbatch report that consultations often opened whilst GPs logged into the computer system and located patient records, although commonly discussion continued over this activity. The data from pharmacist 4 suggest that the same process occurs in pharmacist-patient consultations, but problems with the computer can lead to disruption in the opening conversation.

In contrast, a more recent longitudinal study conducted in America found that communication was not negatively affected by introduction of computers into general practice consultations. Discussion of psychosocial issues did not change and patient satisfaction with the physician's manner (level of concern or listening) did not significantly change. This may be due to increased familiarity with computers in general over time or ease of use of more recent computer programmes (Hsu, Huang et al. 2005). The use of computers in structuring medical consultations has been reported (Theadom, de Lusignan et al. 2003) and the study suggests that an increase in computer use during a consultation resulted in a decrease in the patient-centredness of the consultation including the use of eye contact. However, the sample size of just one consultation with each of four doctors means that the findings may be due to the individual style of the doctor.

One study conducted in Sweden in pharmacy based consultations found that pharmacists who centred on electronic documentation and maintained an intense focus on the computer screen had limited eye contact with patients, and did not obtain a thorough understanding of the patient's narrative (Montgomery 2009). This supports the above findings from GP consultations regarding a reduced patient focus and the data presented in this chapter indicate that similar interactions between pharmacists, patients and computers occur in the UK.

The role of IT within medical consultations is increasing and the data show that pharmacist-led consultations are no different. The use of computers within consultations is varied and can significantly enhance the consultation but care must be taken to control their impact on communication, particularly on the rapport that is built during consultations.

The next section of this chapter will look at the applicability of the Calgary-Cambridge Guide to pharmacist-led consultations.

6.2 Application of the Calgary-Cambridge Guides to the Consultation

The Calgary-Cambridge Guides to the Consultation were designed to help doctors to achieve the best possible outcomes in each consultation through the use of highly effective communication skills. The guides can be divided into two parts for teaching and learning purposes but are designed as a single guide listing 71 communication skills that can be employed across a whole consultation (Kurtz and Silverman 1996). It should be noted that the authors do not anticipate that every consultation should showcase all 71 communication skills, but rather that the doctor is able to select the most appropriate skills to use in each situation, and to use them well. The aim is that a thorough knowledge of the guide will enable practitioners to develop communication skills that are lacking and to enhance those that they already possess.

The Calgary-Cambridge guide, hereafter called the C-C guide, was used in analysing the consultation transcripts of eighteen pharmacist-patient consultations with two aims in mind. Firstly, that such a comprehensive guide would allow determination of the broad range of skills that were demonstrated throughout the consultations, and highlight areas where skills were not in use. This thematic application of the guides to the consultations would also establish whether the C-C guide is applicable to pharmacist-led consultations or whether an adapted or alternative guide would be more appropriate. Secondly, if analysis shows that the C-C guide fits well to the consultations recorded, the place of this guide in helping pharmacists to learn about communication skills for consultations, and to improve these skills, will be considered.

The C-C guide consists of seven sections, each with subdivisions, which contain the individual skills. The guide headings are shown here:

I. Initiating the session
    A. Establishing initial rapport
    B. Identifying the reason(s) for the consultation
II. Gathering Information
    A. Exploration of patient’s problems

  B. Additional skills for understanding patient’s perspective

III. Providing structure to the consultation
  A. Making organisation overt
  B. Attending to flow

IV. Building relationship
  A. Using appropriate non-verbal behaviour
  B. Developing rapport
  C. Involving the patient

V. Explanation and Planning
  A. Providing the correct amount and type of information
  B. Aiding accurate recall and understanding
  C. Achieving a shared understanding: incorporating the patient’s perspective
  D. Planning: shared decision making

VI. Closing the session
  A. Forward Planning
  B. Ensuring appropriate point of closure

VII. Options in explanation and planning – includes extra detail on content and process skills related to specific tasks with the explanation and planning section.
  A. If discussing opinion and significance of problem
  B. If negotiating mutual plan of action
  C. If discussing investigations and procedures

For use in teaching and assessment, the authors of the C-C guide recommend using the guide as two separate sections as this allows teaching to be focussed on relevant areas. The authors explicitly state that for peer review and formative feedback, the guides should not be used as a tick box exercise, but rather the guides should be used to structure systematic feedback observations into the relevant section of the consultation. Linking to specific skills can then proceed in teaching and review. However, for summative assessment the guides can be amended to include a satisfactory/unsatisfactory column and used to assess each skill. Care must be taken to ensure that only relevant skills are included in each assessment as not all skills will be relevant to every consultation, particularly in the explanation and planning aspects of the guide which are included on the second section of the guide, if the sections are used independently (Kurtz and Silverman 1996).

It is important to note that not all skills were included in the analysis of the consultation transcripts. For example, it was not possible to determine exactly where appropriate eye contact was used as the consultations were not video recorded and the transcription format did not allow for analysis of other non-verbal communication, such as speed or tone of voice. It was also not feasible to judge specific sections where appropriate confidence had been displayed, so this was not included in the analysis. The final skill to be excluded was skill 36 - Give explanation at appropriate times: avoid giving advice, information or reassurance too early. This was not included as determining when was the appropriate time would require knowledge from outside of the transcript, for example a patient's progress along a treatment path. In total 68 of the 71 skills were included in analysis. A full copy of the guide can be found in appendix 10, but brief descriptions of the specific skills will be given where appropriate.

This section of the chapter will present the results of the analysis of the pharmacist-patient consultations in three sections. Firstly describing the demonstration of C-C guide skills within the consultations, secondly to explore any sections of the consultations that did not correspond to any of the specific skills outlined in the C-C guide, and finally to discuss the applicability of the C-C guide to pharmacist-led consultations.

6.2.1 Communication Skills Demonstrated In Pharmacist-Patient Consultations as Defined by the Calgary-Cambridge Guide

As described above, the C-C guides contain a list of 71 distinct communication skills that can support an effective patient consultation. A practitioner would be unlikely to utilise all 71 skills within a single consultation and the number of skills demonstrated varied considerably within the pharmacist data. The number of skills explicitly used ranged from 19 to 47 across the consultations, with a mean of 32. There was no discernable difference between primary and secondary care settings and with a small sample size it was not possible to run statistical exploration of the data. In addition, the qualitative nature of this thesis aims to provide a broad understanding of the communication processes that occur within pharmacist-patient consultations rather than numerical or statistical data.

Due to the large number of separate skills defined within the C-C guide, it is not possible to report on the representation of them all within the pharmacist consultation data. The pharmacists demonstrated skills from many areas of the guide and, for example, commonly used the skills underpinning ‘Aiding Accurate Recall and Understanding’ within the C-C guide. The wide coverage of many skills within the C-C guide suggests that the guide is broadly applicable to pharmacist-led consultations, however some areas were not well represented. This section will focus on those skills within the guide that were not commonly demonstrated by pharmacists in this study and discuss the implications for the applicability of the C-C guide to this context.

One of the most poorly represented sections of the guide was arguably the most important, that of initiating the session. The use of skills within this section is vital to create a good first impression with the patient and to build initial rapport that will underpin the session. The opening of consultations was mentioned during pharmacist interviews as an area that may require future training for pharmacists conducting consultations and this is supported by the lack of skills demonstrated in the consultation data. However, there are certain considerations that may explain the low level of use of certain skills in this section. The frequency of skills used within initiating the session and both sub-sections are shown in Figure 6.1.

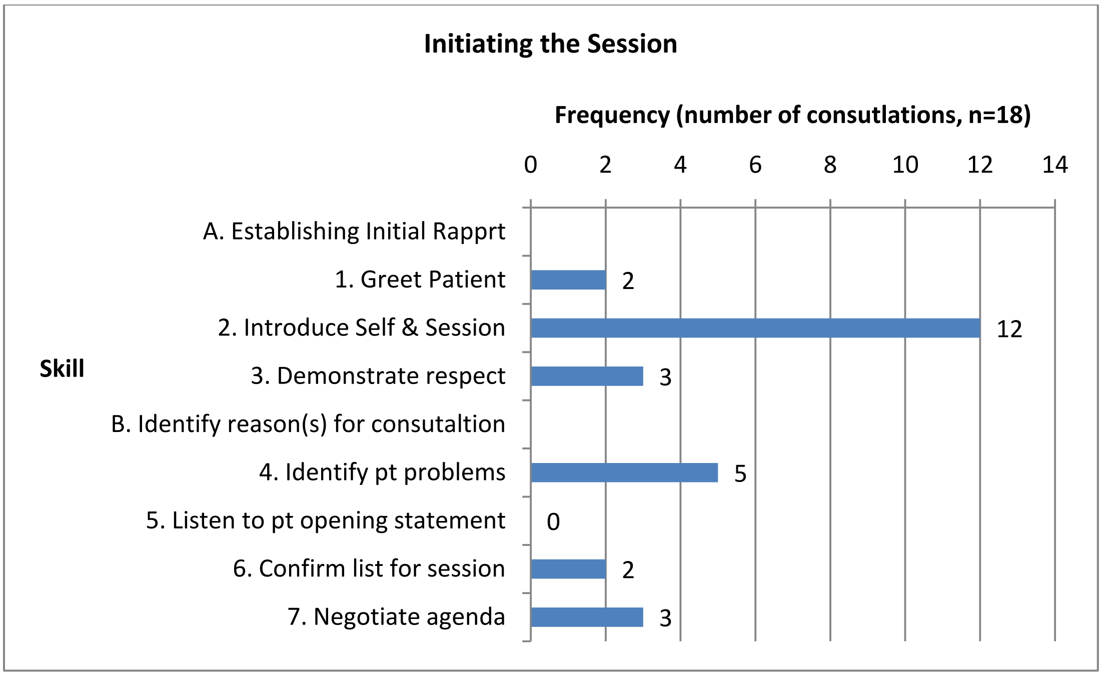

Figure 6.1 Frequency of Use for skills 1-7 of the Calgary-Cambridge Guide

Firstly, skill 1 required the pharmacist to greet the patient and obtain their name, and this was only recorded twice on tape. For community pharmacists, the initial greeting of the patient occurred before the patient entered the consultation room and so could not be recorded. This has also occurred in studies reported in the literature where consultations took place in the patients' home (Greenwood, Howe et al. 2006). In addition, all community pharmacists had strong relationships with their patients and did not need to confirm the patient's name. In the hospital based clinic, the pharmacist did not have prior knowledge of the patient, but in each case the first patient interview had been conducted immediately prior to the consultation and the researcher was still present. As the pharmacist knew which patients were involved in the study, and only one session took place on any given day, the pharmacist could have been confident of the patient's identity. However, the rapport building nature of this skill should be remembered and it is not always safe to assume that you are speaking with the correct patient. A proficient introduction can affect the accuracy and efficiency of the consultation, and in combination with the significant impact that first-impressions can have on the future relationship of participants, the skills of initiating a session are skills worth practising (Silverman, Kurtz et al. 2005). Greeting the patient by name was valued by pharmacists in one study with respect to building rapport (Hargie, Morrow et al. 2000). However the pharmacists did not place such importance on the function of opening the consultation. This may be due to pharmacist inexperience in consultations and a lack of understanding of the function that each stage of the consultation plays. Further training in consultation skills should include opening consultations.

Also within section one, skills number 4 to 7 are used to identify the reasons for the consultation and negotiate an agenda for the session. These skills were also poorly utilised by the pharmacists with only five pharmacists identifying the patient's problems using open questions (skill 4). Published research also found that pharmacists did not establish the reason for the visit or outline an agenda (Greenwood, Howe et al. 2006). The data suggest that this section in full may not be relevant to the majority of pharmacist-led consultations that were observed during this study due to the nature of the consultations. Seventeen of the eighteen consultations had an established predefined purpose and the final consultation had a set purpose, with the possibility of covering additional items. Both pharmacist and patient were aware of the overall function of the consultation before the appointment began in each case. This may remove the requirement for devoting time and specialised skills to ascertaining the purpose of the session.

In addition, only one consultation was instigated by the patient, the remaining seventeen were requested by the pharmacist or another member of the healthcare team. This is important to note as the patients may not have an agenda of their own to cover or may not know what will be relevant. The difficulty of setting a patient-led agenda has been reported in genetic counselling sessions (Pilnick 2002). It was found that if patients lacked the background knowledge to formulate an agenda or did not know what would be covered within the consultation, then they were unable to contribute effectively to the formation of an agenda for the session. The skills discussed here may, therefore, not be appropriate for many pharmacist-led consultations, but there is still a need for setting out a plan for the session. For example, summarising of any current information or care plans held by the pharmacist or summarising past sessions, confirming that the pharmacist's proposed agenda is agreeable to the patient, and providing an opportunity for the patient to raise their own agenda, are key in ensuring the smooth running of a consultation.

Further data from the pharmacist consultations support the importance of setting out an agenda for the session in order to develop another under-represented skill. Skill 19, which uses summarising at the end of each line of enquiry to confirm understanding before moving on the next section, was only utilised in seven of the consultations. This suggests that pharmacists are not building in any demarcation between sections of the consultation. This could result in consultations that move swiftly from one topic to another with the potential for patients feeling left behind. Explicitly stating a clear agenda at the start of a consultation facilitates the task of making sections distinct as both parties are aware of the items to be discussed and their proposed sequence (Greenwood, Howe et al. 2006). The data suggest that negotiating an agenda with the patients may not be appropriate in some pharmacist-led consultations, particularly in consultations that are not initiated by the patient. However, making an agenda overt and ensuring that the patient is happy with the proposed agenda is important for these consultations. This section of the C-C guide may need slight adaptation to fit the requirements of many pharmacist-led consultations.

Another skill set which was not well used by all the pharmacists was that of information gathering. The use of skills in this area was much higher than for initiating the session and numbers of consultations including these skills ranged from four to ten out of a maximum of eighteen consultations, as shown in Figure 6.2.

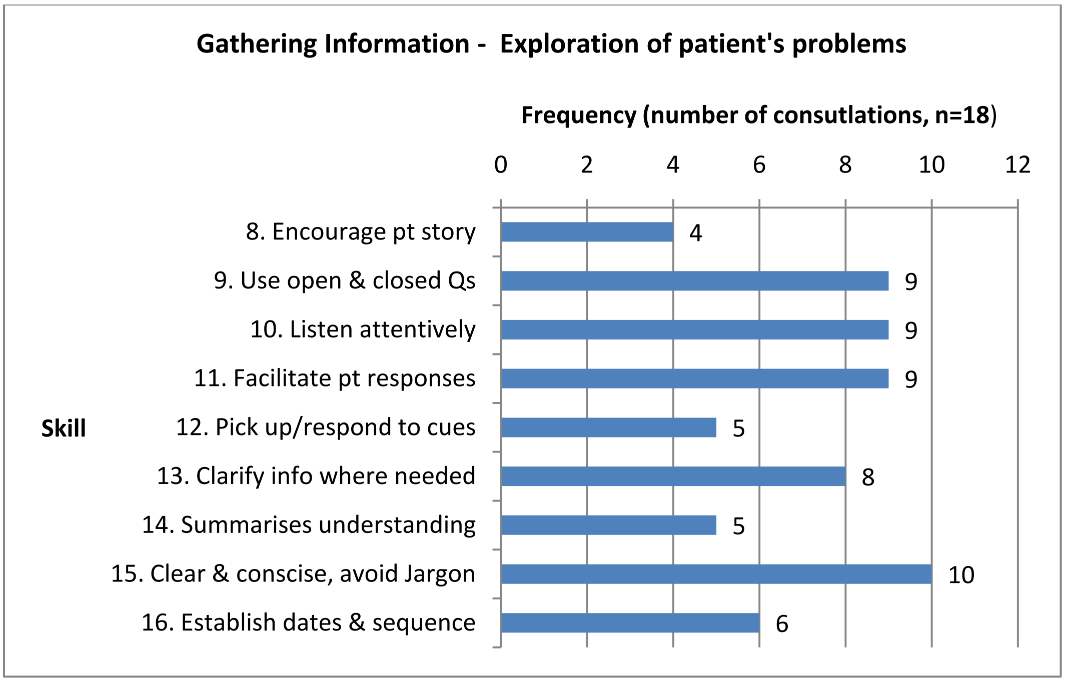

Figure 6.2 Frequency of Use for Skills 8-16 of the Calgary-Cambridge Guide

This low use of some of these skills may again be due to the nature of pharmacist-led consultations. The type of information gathered by the pharmacists in this study was often straightforward and appropriately obtained using closed questioning. However, some pharmacists did make use of more of the skills in this section when the need arose. The importance of using both open and closed questioning techniques in pharmacist-patient consultations has been reported for a long time (Fisher 1992). However research from Sweden found that only 2% of questions asked by community pharmacists were open in nature (Skoglund, Isacson et al. 2003) and Canadian data show just 1% (Deschamps, Dyck et al. 2003). These findings are supported by American data indicating open questions were used in just 3% of pharmacist-patient interactions (Sleath 1996). The use of closed questioning techniques may be related to training provided to pharmacists, for example, the use of mnemonics in gathering information relating to medicine sales in community pharmacy (Banks, Shaw et al. 2007). When creating a list of skills important in consultations, pharmacists detailed subjects for questioning rather than the skills of questioning themselves (Hargie, Morrow et al. 2000). Pharmacists are using the skills within this section but not in every consultation and therefore, pharmacists may benefit from additional training in information gathering, particularly the use of open questions and responding to patient cues. Research into training of medicines counter assistants has shown that focussed training did not increase the use of open questions (Cleland, Francis et al. 2007). However, a 2002 study that analysed the effectiveness of a three day communication skills training course run by Cancer Research UK for oncologists found significant improvements in the use of open and focussed questions, showing more appropriate responses to patients' cues and displaying more empathy with patients. The study presents both physician reports of confidence and competence and assessment through analysis of videotaped consultations before and three months after the intervention (Fallowfield, Jenkins et al. 2002). Future training for pharmacists should focus on techniques that will help pharmacists to implement their new and existing skills to enable pharmacists to make the most of communication with patients. Responding to cues and other skills will now be explored in the broad context of the consultation rather than linked to each individual section of the C-C guide.

Other skills from the C-C guide that were not routinely demonstrated by the pharmacists come from a range of sections of the guide but all relate to patient participation in the consultation. The skills fall into four main categories:

- Checking patient understanding
- Providing overt opportunities for questions
- Elicitation and exploration of patient views, beliefs, thoughts or feelings
- Responding to verbal and non-verbal cues from the patient.

The data show that pharmacists did not demonstrate skills aimed at encouraging patient involvement in consultations in several areas. One of the key skills in explanation and planning is to 'chunk and check' the information given (skills 33 and 42). This entails breaking down information into manageable 'chunks' and checking that the patient has understood before moving on. Whilst pharmacists frequently broke explanations down into manageable sections, they did not check out the patients' understanding of the information provided. This is supported by findings from the pharmacy (Deschamps, Dyck et al. 2003; Doucette and Andersen 2005; Dyck, Deschamps et al. 2005) and medical literature (Stevenson, Cox et al. 2004; Farrell, Kuruvilla et al. 2009). Pharmacy specific research has found that pharmacists in a South African HIV clinic are, in contrast, using a range of techniques to check patient understanding of drug regimens. The study reports that this is highly effective and linked with a good level of understanding from patients which was not found elsewhere (Watermeyer and Penn 2009).

Checking a patient’s understanding can also provide patients with a defined opportunity to ask questions and is linked to skill 44 which specifically relates to encouraging patient questions and providing such opportunities. During the consultations, patients’ questions were dealt with appropriately in all but a few circumstances, which shows that pharmacists have the skills required to handle questions. However, signposting for the patient to indicate when to ask questions was lacking. During the patient interviews, it was reported that patients felt able to ask questions, but they would have liked to have been given a clear opportunity to ask questions at the end of the consultation which they felt was absent; this supports the data presented here. A Swedish study found that in 42 recorded community pharmacy interactions, no patients were specifically encouraged to ask questions (Skoglund, Isacson et al. 2003). This study examined interactions initiated by a patient filling a prescription rather than clinic style consultations but supports the data presented here and suggests that this may be a widespread issue in pharmacist-patient communication. Earlier research proposed that pharmacists should be more direct in asking patients if they have any questions (Schommer and Wiederholt 1997) and the data presented here suggest that this area of communication skills has not improved over time. Literature reporting communication during medical consultations has suggested that if patients are highly participative and ask questions throughout the consultation that doctors may feel they do not need to provide further opportunities as they assume that the patient will ask further questions without prompting (Cegela and Post 2009).

Further medical research has shown that it is not just the provision of an opportunity for questions that is important in encouraging patient participation, but also how that opportunity is provided. Heritage et al. (2007) reported that significant differences were obtained by substituting the word 'any' with 'some' when eliciting patients' unvoiced concerns. They explored the two following questions in use at the end of a consultation: "Is there anything else you want to address in the visit today?" and "Is there something else you want to address in the visit today?" By using the 'some' version of the question, more of the patients' unmet concerns were voiced and explored than when the 'any' question was used (Heritage, Robinson et al. 2007). Research has shown that doctors frequently use closed questions (Roter and Hall 2006), which is echoed in the data presented here, and that such questions are often phrased with bias. This means that a question is asked in such a way as to indicate to the patient that a particular response is preferred. Questions asked in this style have been termed yes/no preferring questions (Heritage 2010). Doctors understandably use some bias, or assumptions in their questioning style as communicating in entirely neutral terms would fail to build any relationship with, or show interest in, the patient. However, such questions should be used with caution in order that patient participation is not discouraged. Practitioners, including pharmacists, should be aware of the impact that yes/no preferring questions can have on patient participation. Not only should pharmacists provide a distinct opportunity for patients to ask questions, but they should be careful to do this in a way that encourages the patient to bring additional questions to the consultation. The data presented here show that pharmacists do not provide overt opportunities for patients to ask questions and this needs to be addressed in a way that creates real opportunities for patient involvement.

In order to provide a tailored explanation to patients, skills 34 and 35 in the C-C guide outline checking what information the patient already has, and then determining what further information the patient would find helpful. In twelve consultations, patients were asked for their starting point relating to the topic currently under discussion, however, in only three consultations were patients' asked what further information they would like. This is a crucial step in ensuring that the consultation is truly patient-centred but is an area which pharmacists can find difficult.

The third area related to patient participation that was under-represented in the data, was that of eliciting patients' views, beliefs, thoughts or feelings. This specifically relates to a number of skills in the C-C guide including 8, 12, 17, 18, 46, 48, 50, 51, 60, 63, 65, 68 and 71, but other skills are also associated with this process. The number of skills within the guide devoted to establishing the patient's perspective demonstrates how important the authors of the C-C guide feel it is to achieve this during consultations. These skills are based in different sections of the guide and may appear repetitive but the skills relate to use in the particular situation of the consultation underpinned by the section of the guide. The frequency of use these skills is shown in Figure 6.3.

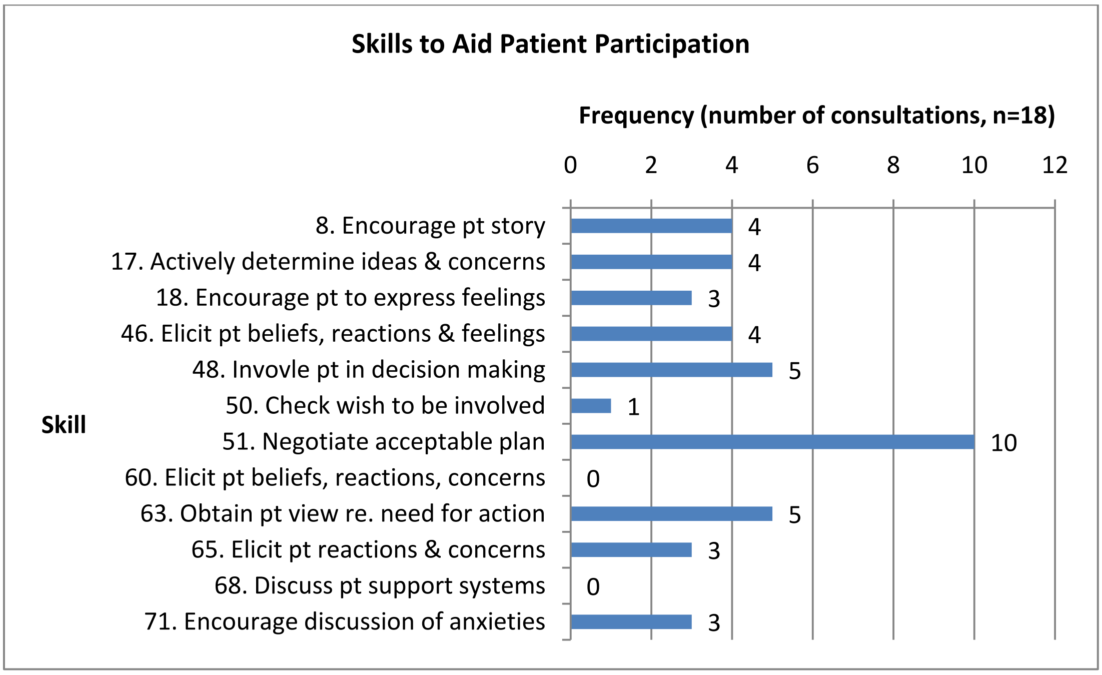

Figure 6.3 Frequency of Use for Patient Participation Skills of the Calgary-Cambridge Guide

Figure 6.3 illustrates low representation of these skills, and in addition, many of the instances of discussion of patient thoughts, concerns or beliefs were initiated by the patient without encouragement from the pharmacist. These examples were assigned to the relevant skill number if the pharmacist responded appropriately as patients are entitled to contribute their thoughts without prompting.

The importance of engaging patients in medical consultations has been well documented (Coulter and Ellins 2007). An American study exploring a range of pharmacist-patient relationship constructs found that pharmacists were able to improve patient participation and communication within the consultation by increasing the patient-centredness of the consultation, and this in turn raised patient satisfaction. The authors defined patient-centredness as showing concern about and being attentive to patient medication needs, listening, asking for the patient's opinion and being easily approachable (Worley-Louis, Schommer et al. 2003). Ensuring that consultations are patient centred has only recently been a focus of research and education and it may be that pharmacists are still trying to adjust their consultation style to include these communication skills. In addition the pharmacists involved in this study had been qualified for between 7 and 38 years which may mean that they had received little formal training about the concepts involved. Conducting clinic style consultations is also a new role for many pharmacists and a lack of training and experience may contribute to the low level of use of these important skills. The C-C guide could provide a useful learning tool for pharmacists in this area as it not only outlines the skills required, but places them within the different contexts of a consultation. A cohort of pharmacists undertaking supplementary prescriber training received communication skills training utilising the C-C guide (Cleland, Bailey et al. 2007). The study reports that pharmacists found training useful in the difficult and new areas such as eliciting patient beliefs and structuring consultations, but found them difficult to implement in practice. The data presented here support these findings by presenting actual consultation data which illustrate those pharmacist reports and show that these key skills are under-represented in pharmacist-led consultations.

Responding to verbal and non-verbal cues is essential in ensuring that the patient is satisfied with the consultation and that any problems or concerns that the patient may have are discussed. Pharmacists observed in this study showed good use of the skills for reacting to patient cues, however, not all important cues were picked up. The data show that a total of 32 patient cues were investigated over 15 consultations. This relates to skills 12 and 45 which describe picking up cues in the information gathering, and explanation and planning sections of the guide respectively. As previously mentioned, the data refer to verbal cues only as non-verbal cues were not included in analysis. It is encouraging to see that a large proportion of patient cues were picked up, as demonstrated in the extract below:

Ph11/Pt18 (Community):

> *Ph: We will soon be starting a stop smoking clinic.*
>
> ***Pt: Is the interview over now?***
>
> *Ph: No this is part of it. (Laughs) You can't tell me to bog off yet. (pause) We will be starting a stop smoking service here,*
>
> ***Pt: Yes.***
>
> *Ph: with one-to-one and we will be able to help you or try to help you. If you want it.*

In this example, the pharmacist has picked up from the patient's reaction to the stop smoking clinic that she is not receptive to advice about giving up smoking at this time; in fact she would rather end the consultation. The pharmacist draws on his prior relationship with the patient and makes use of a joke to lighten the tone. He feels his message is important enough to persevere but he presents the information in a succinct and non-pressurised way. His final comment of 'If you want it' is important as this makes it clear that he is not putting any pressure on the patient to take up this offer. This extract shows that some patient cues were picked up, and appropriately dealt with, but this was not the case in all examples. It is unrealistic to expect any practitioner to pick up on every patient cue as cues can range from obvious to faint, and fully exploring every cue would result in consultations running over time, but practitioners should be perceptive to potentially important cues. During analysis it was found that 16 cues were missed of varying importance. Cues related to a range of topics including indications of a desire to talk about something or seeking advice, to potentially important clinical matters. The example given here is a missed cue that could have yielded important information about the patient's health.

Ph4/Pt8 (Hospital):

> *Ph: like we said with other medicines erm, the ones you're on now are fine. Paracetamol and codeine are fine for pain relief, erm*
>
> ***Pt: Yes I've got pain on the chest. (cont.)***

> *Ph: Yeah, but anti-inflammatories like Brufen, but then you'd probably be struggling with those if you had your problem with aspirin but they're not a great combination.*

This patient was attending a warfarin clinic and the pharmacist had previously commented on the patient's 'long cardiac history'. It would seem that a cue relating to the patient's chest, and potentially his heart, should be investigated, but in this instance it was missed. The data suggest that pharmacists are aware of the need to respond to patient cues and are able to effectively do so in many instances, however, further training on how to spot important cues, and to deal quickly with less important cues without detriment to rapport, could be useful for pharmacists conducting consultations. A Canadian study suggests that missing patient cues could be due to maintaining focus on the pharmacist's own agenda (Dyck, Deschamps et al. 2005). By involving the patient in setting an agenda, and structuring the consultation well, the pharmacist may have more freedom to respond to patient cues.

The final section of the C-C guide to have poor representation within the consultations was that of discussing opinion and significance of a problem, which is an extended option at the end of the guide. The skills in this section would primarily be required during diagnosis of a complex or emotional issue. The skills were not lacking in the consultations observed but rather not required. This is due to the nature of the consultations conducted by the pharmacists in this study which were related to treatment rather than diagnosis as this is the area of expertise of pharmacists.

When applying the C-C guides to the consultation data, a number of skills were not well represented. Some areas of the guide were not entirely applicable to the consultations such as those skills in initiating the session, or discussing opinions and significance of problems. These will be discussed later in the chapter. Others skills that were relevant to the consultations but still not well represented, indicated areas in which pharmacists are not demonstrating good use of skills and identify areas for potential future training, such as the use of open and closed questions, and creating a patient-centred consultation.

The next section of this chapter will discuss the data not assigned to any of the specific skills of the C-C guide.

6.2.2 Consultation Content Not Demonstrating Use of Communication Skills as Defined by the Calgary-Cambridge Guide

During analysis, sections of the consultation were matched to the demonstration of one or more specific consultation skills from the C-C guide, or otherwise classified as 'not coded'. It is interesting to note that as consultations became longer, the percentage of data classified as not coded increased. Again, due to the small sample size and qualitative nature of the study, no statistical tests have been performed. The consultations ranged from 15mins32secs to 1hr 06mins24secs and lasted an average of 29mins36secs. This is comparable with another study reporting that pharmacist-patient consultations lasted from 15-90 minutes (Chen and Britten 2000). One other study found that pharmacist-led consultations occurring in patient homes all lasted longer than 45 minutes (Greenwood, Howe et al. 2006). The increased consultation length may be due to less concurrent demands on the pharmacists' time when conducing consultations in the patients' homes. During the pharmacist interviews, pharmacist 1 reported that he would spend as much time as necessary with a patient whilst conducting an MUR in order to ensure that the patient fully understood any explanations, and was happy with any changes or recommendations made. Two consultations were observed for this pharmacist lasting 1hr06mins and 1hr02mins, however, the percentage of data not coded to a specific skill on the C-C guide were 18.6% and 16.6% respectively. It is possible that the pharmacist would be able to achieve his goals for the consultation in a shorter time if he adhered more closely to the C-C guide throughout the consultation, however, the data show that this pharmacist did not have low utilisation of communication skills as he demonstrated use of 41 different skills in each consultation. The high percentage of non-coded consultation could indicate in an inefficient consultation process, but it is possible that the pharmacist was performing tasks not identified by the guide that were important to the consultation during this time. During interviews, several pharmacists reported concerns over the time that consultations can take. There were mixed opinions from the pharmacists about whether the consultations should adhere to a short time limit, or be allowed to run their course, which were reported in chapter 4. The data shown here suggest that extra time allowed for consultations may not provide better outcomes unless good communication skills are utilised throughout, and that shorter consultations may be more efficient due to consistent use of good communication skills. However, published research suggests that it is important to maintain a minimum time for consultations. In a North American study it was found that pharmacists spent an average of 8.8mins per patient compared to an average for a range of healthcare professionals of 16.1mins. The research reports that pharmacists completed less of the assessed tasks during their consultations and the authors suggest that time was a key determinant of performing those care activities (Doucette and Andersen 2005).

Of the eighteen consultations recorded, sixteen have sections that were not coded. The mean was 8.6% of the consultation classed as not coded ranging from 0 to 18.6%. This shows that large proportions of the consultations did not align with the skills described in the C-C guide. The data that was classified as not-coded were grouped into two broad categories:

- Data relating to a skill defined in the C-C guide but where the pharmacist was not demonstrating that skill (unsatisfactory demonstration of a skill)
- Data not related to any specific skill within the C-C guide.

Data illustrating absence of, or unsatisfactory use of a specific skill were related to 18 of the 71 skills of the C-C guide, however, most had small representations within this category. The five most commonly referenced skills in this section are outlined in Table 6.2 below.

Table 6.2 Skills Most Commonly Judged to be Unsatisfactory During Pharmacist-Led Consultations

Skill Number	Summary Description	No. Consultations Referenced	Total No. References
10	Listening attentively	2	9
24	Using computers unobtrusively	8	27
27	Showing empathy	5	9
40	Avoiding jargon	6	9
45	Responding to patient cues	8	9

As can be seen from Table 6.2 the most common specific skill to be linked with data that was not coded was the use of computers within the consultation. This means that the data show a pharmacist not satisfactorily demonstrating the skill of effective and unobtrusive use of computers at a time where the consultation was relevant to this skill. The use of computers within pharmacist-led consultations has been discussed in some detail earlier in this chapter and so will not be revisited here, except to say that 27 instances across eight different consultations indicates that this may be a significant problem for pharmacists to address, and the data support the need for action to be taken to tackle this difficult area. The skill of responding to patient cues has also been addressed above and will not be discussed in detail here.

The remaining three skills of 10, 27 and 40 indicate examples where pharmacists were not listening attentively, showing empathy or avoiding jargon and each was referenced nine times. This may not be a high number over a total observed consultation time of 8 hours and 52 minutes, but not making use of a relevant skill can have a range of impacts upon a consultation. One example of the use of jargon is taken from a consultation with pharmacist 4:

Ph4/Pt4 (Hospital):

> *Ph: If the Phlebo goes up, we take that off you and tear that bit off and you can keep the top bit.*
>
> ***Pt: Sorry so who'll take it?***
>
> *Ph: The blood taking*
>
> ***Pt: Oh right yeah, next week, yeah***

In this example, the effects on the consultation are minimal as the patient feels able to ask for clarification. Whilst all attempts can be made to avoid or explain jargon, it is likely that occasional use of complicated terms will occur. If the pharmacist has been careful to create an atmosphere in which the patient feels able to participate and ask questions, then any negative impact will be limited. The use of jargon becomes more problematic if it is frequently used causing the patient to feel hesitant in asking for multiple clarifications, or if insufficient work has been done on building rapport so that the patient does not feel able to participate. Neither of these circumstances was seen in the data which suggests that the use of jargon was unintentional and did not negatively affect the consultations.

The skills of listening attentively and showing empathy are strongly linked to the encouragement of patient participation that was discussed above; however, these skills were not included in the list of skills that were under-represented in the main analysis. This suggests that pharmacists are making good use of these skills during consultations, but at times they are lacking. A frequency of just 9 instances where each skill was missing, in comparison to 23 and 33 demonstrations of satisfactory use of skills 10 and 27 respectively, indicates that it may not be a problem with a lack of understanding or practise of these skills. Research exploring the effectiveness of a training intervention to increase the empathy that pharmacists used when interacting with patients showed only a small increase in empathy (Lilja, Larsson et al. 2000b). The author suggests that this may be due to the difficulty in achieving behaviour change despite changes in understanding. This is supported by Lonie (2006) who found that pharmacists developed empathy over time, either through learning from role models, or self-reflection. The data presented here suggest that pharmacists in this study know how to demonstrate empathy in consultations, and this may be as a result of their length of time in practice. It is possible that the C-C guide may be useful in helping pharmacists to distinguish between the communication skills that they are using and support the self-reflection process which may in turn improve their utilisation of these skills. These skills all link to encouraging patient participation and creating a patient centred consultation. This reinforces the findings outlined above.

In relation to the second category of non coded data, one key theme emerged that did not relate to a specific skill and this was non-medical conversation. In some situations, casual conversation could be aligned with a skill listed in the C-C guide, however, most examples were simple discussions about social matters. Engaging in non-medical conversation within a consultation, or allowing the conversation to get sidetracked, is common and if controlled within the time constraints of the appointment, can greatly enhance the rapport between participants. The C-C guide details ten skills related to building relationships within the consultation, but all are related to the medical content of the consultation. These are important skills to master, and the number of such skills on the guide shows how important the authors believe them to be. However, it was not possible to code most of the conversational elements of the consultations due to the specificity of the skills. In the supporting information, the authors stress the importance of building relationship and rapport throughout the consultation, but attending to general discussion does not feature on the guide (Silverman, Kurtz et al. 2005). It could be that the authors do not feel specific skills are required in order to facilitate non-medical conversation. The data presented in chapter 5 suggests that patients value the opportunity to ‘have a chat’ with their pharmacist, to get to know them, and for the pharmacist to build relationships with the patient and their family. This is supported by literature showing that pharmacists engaging in interpersonal communication, such as casual conversation, can result in patients perceiving a trusting and satisfying relationship with their pharmacist (Worley-Louis, Schommer et al. 2003). The study reported a weak positive correlation between perception of relationship quality and perception of self-efficacy for medication management suggesting that building rapport and relationships through non-medical conversation can perhaps increase a patient's responsibility for their own care. This study researched a sample of older patients which is reflected by the sample for the data presented in this thesis but may not be representative of other age groups. Further research has found that patients perceive a better relationship with doctors than with their pharmacists which suggests that pharmacists still have work to do in improving in this area (Keshishian, Colodny et al. 2008). Engaging in social conversations has also been used as an explicit indicator of a participatory approach by pharmacists which is geared towards encouraging patient involvement in consultations (Sleath 1996). In addition, it takes practised communication skills to allow such conversations enough space within a consultation without causing the appointment to overrun. Literature shows that pharmacists view building rapport as a main priority (Hargie, Morrow et al. 2000) and this is supported by the pharmacist interview data reported in this study. This is perhaps an area that would need to be included in a guide for pharmacist-led consultations.

Exploration of areas of the consultation that did not correspond to demonstration of specific skills within the C-C guide has shown that pharmacists have widespread difficulties in using computers in a way that does not interfere with consultations. The analysis also identified skills that pharmacists sometimes do not satisfactorily utilise such as responding to patient cues, listening effectively, showing empathy and avoiding the use of jargon. These were not major concerns within the consultations due to sufficient satisfactory use elsewhere; however, they reinforce the need to focus future training on encouraging patient participation and creating a patient centred consultation.

The data also highlight the importance of social conversation to pharmacist-patient relationships and consultations. Whilst the skills required to build rapport within a consultation are detailed on the guide, all are related to medical conversation. Skills for facilitating non-medical talk in consultations could be important to define on a pharmacy specific communication guide.

The following section will discuss in more detail the applicability of the C-C to pharmacist-led consultations.

6.2.3 Applicability of the Calgary – Cambridge Guide to Pharmacist-Led Consultations

The Calgary-Cambridge guides offer a robust framework from which to explore the communication skills used in pharmacist-led consultations. Application of the guide to consultation transcripts showed strong skill use in many areas of the guide, but also highlighted several sections which were under-represented. These areas were not represented in the data for one of two reasons, either due to lack of pharmacists' use of the skill, or differences in the consultation process. In order to align the guide with pharmacist-patient consultations, restructuring of several areas including, initiating the session and information gathering, might be required to accommodate the focussed nature of many interactions. However, the authors do state that not all areas of the guide will be relevant in every consultation and stress that guides can be adapted by selecting the relevant skills as required.

Within the 'Initiating the session' section several changes could benefit a pharmacy specific guide. Firstly, the explanation of skill 1 involving greeting the patient could be expanded to include social aspects of greetings that commonly occur within pharmacy. Skills related to identifying the reasons for the consultation could be made more flexible, for example using an open question to establish the reasons for a consultation, and listening without interruption to the response may not be appropriate if the pharmacist requested the consultation. Instead skills related to summarising previous sessions or current information are required. Negotiating an agenda might need to be expanded to include agreeing a previously set agenda to represent the more common opening to pharmacist consultations.

In addition, skills for appropriate handling of patient questions could be expanded due to the frequent use of this skill within the consultations. Currently this corresponds only to skill 44 but responding to patient questions requires a complex range of skills and the data presented here suggest that this is a key area for pharmacists. Preliminary research in the medical arena has shown that patients who participate more in consultations can influence the patient-centredness of the physician's communication style (Cegela and Post 2009). Skills relating to using patient questions to inform the rest of the consultation, including content and process, could perhaps be included in this area of the guide. Pharmacists often have to refer patients to other sources of help due to the pre-defined remit of their consultations, for example other healthcare professionals, support groups or written information. The skills of referral are not included in the guide but would be appropriate for pharmacist-led consultations. Additionally, patient questions can affect the flow and structure of consultations and being able to quickly restructure a consultation is essential. In order to fully support the development of communication skills in handling patient questions, differentiation between skills used in dealing appropriately with patient questions might be useful for pharmacists.

Crucially, the guide may also need to be expanded to include a wider reference to building rapport through general social conversation, which is a key component of pharmacist-patient interactions and is currently unaccounted for in the C-C guide skill set. This may require only a single skill outlining the importance of attending to casual conversation within an appropriate time frame and its relation to building rapport. The guide is currently strong in outlining key skills for building relationships that can be used in relation to the medical content of the conversation and these do not need to be amended to align with pharmacist consultations.

The guide is currently widely accepted and utilised in training medical students and doctors and has a strong potential for use in training pharmacists. The guide could be particularly useful with regard to the complex and unfamiliar skills of eliciting patient thoughts, beliefs and concerns, and encouraging patient participation at all levels which is supported by the literature (Cleland, Bailey et al. 2007). By clearly differentiating the skills which are used at all stages in the consultations, the guide can help pharmacists to reflect on their own skills and put them to use at appropriate stages of the consultation. The above suggested changes to the guide are not substantial but could facilitate pharmacists' use and acceptance of the guide for training.

6.3 Summary

The consultation data has given rise to a range of interesting findings. Two key themes to emerge from the data were the place of structure and information technology within consultations.

Structure was found to be important to the pharmacists within this study and a range of techniques were used in order to provide structure to the consultations. Formal structures including protocols were utilised in both electronic and paper formats but it is important for pharmacists to maintain a patient-centred approach that enables deviation from any structure when required, in order to meet an individual patient's needs. Utilising protocols, PMRs and mental checklists are all valid ways to structure consultations and introduce routine to the consultations. Use of scripted segments of text within consultations allows focus to be maintained on patient-specific factors whilst routine tasks can be completed with minimal distraction. Making the structure overt and involving the patient can facilitate communication.

The use of information technology, specifically computers, within pharmacist-patient consultations presents the same benefits and problems found in medical consultations, and in Swedish pharmacy based consultations. Disadvantages include difficulties in using the software, inhibition of eye contact, and a move away from patient centred consultations. Advantages can include increased patient input due to shared information, an increased ability to source answers to patients' questions and provision of structure. It is essential that pharmacists are able to control their use of computers and to maximise the positive influences whilst maintaining a strong patient focus. Lessons can be learnt from medical research and future training in the role of technology within consultations could be helpful to pharmacists.

The results presented in this chapter show that skills from the Calgary-Cambridge guide not demonstrated in the pharmacist-led consultations were either not relevant to the style of consultation or represent a possible area for future training or awareness of pharmacists. The most significant type of communication skills to be under-used by the pharmacists was those relating to patient participation in the consultation. Creating a patient-centred consultation is essential in achieving the maximum potential of a consultation. It is however important to remember that the consultations were not evenly distributed between the pharmacists which may have affected the results of this study. Skills either under-used or commonly used by pharmacist 4 will have a greater influence on the results than those for other pharmacists. An important area for pharmacist-led consultations is social conversation. This is not currently accounted for in the Calgary-Cambridge guides but is linked with building relationships in the pharmacy literature.

The Calgary-Cambridge guides strongly relate to the communication skills that are demonstrated in pharmacist-patient consultations. Amendments to the guide, including restructuring specific sections and including additional skills, could make the guide fit more closely with the types of consultations currently conducted by pharmacists in the UK. The guide has large potential for use in the future training of pharmacists and helping them to continue to develop their communication skills through reflective practice.

Chapter 7.Conclusions and Implications

This final chapter of the thesis will outline the strengths and limitations of the study, and will then present some reflections on the process of the study and the data presented. The chapter will continue by outlining the main conclusions that have been drawn from the data, and the implications that these conclusions may have on research, training and practice. Finally, the chapter will conclude with suggestions for future work that have arisen as a result of this research.

7.1 Study Limitations and Strengths

As with any research study, there are several limitations that affect the data presented in this thesis. The first limitation is the small sample recruited to the study. As outlined in the methodology and methods chapter, a sample recruited to a qualitative study is not usually intended to be representative of a larger population or to produce generalisable data; rather the study aims to provide reliable, detailed information which accurately reflects the context of the research or the individuals that are the topic of the research. The sample size of this research was small and from a discrete geographical location; consequently the data are not representative of a wider population as described above. In addition, the pharmacists recruited to the study were already conducting advanced pharmacy services that included consultations with patients. As such they may have been more confident or competent communicators than other pharmacists, which may influence the data. Finally, in relation to the sample, the pharmacists were responsible for the recruitment of patients to the study. This may have resulted in bias in those patients invited to participate in the study, particularly those recruited in community pharmacy. For example, patients with a favourable view of pharmacy services, or who had a good relationship with the pharmacist, may have been selected. The patients recruited via the hospital clinic were not known to the pharmacist prior to recruitment and letters of invitation to the study were sent to all eligible patients and so no bias resulting from pharmacist selection will be present in this group of patients.

This study had difficulties recruiting both patient and pharmacist participants and did not reach the target sample size of patients. The pilot study did not indicate that there would be difficulty in recruiting patients and so no changes were made to the methods for the main study. However, problems emerged at the early stages of the main study and the difficulties in recruiting patients were apparent. This was a frustrating stage in the research as enthusiastic pharmacists had been recruited to the study but, except for one, they found it difficult to recruit patients. In community pharmacy, this was primarily due to differences in arranging MUR consultations. The study pharmacists had anticipated at least some MURs to be booked via appointments when they joined the study, however, when data collection began the pharmacists found that nearly all MURs were conducted opportunistically. This means that the appointment based consultation with a pharmacist is even less familiar to patients than anticipated. Other reasons given for difficulties in patient recruitment included a lack of time and organisational changes such as staff leaving.

As it became clear that recruitment targets would not be met, more pharmacists were approached to participate in the study in an attempt to increase patient numbers. This led to an increase in the number of pharmacist interviews which were then able to form a greater part of the research analysis.

Recruitment of the additional pharmacists was not as easy as the initial recruitment had been. Some pharmacists did not want to participate in the study and a number of reasons were given including: lack of time; nerves at being observed due to being new at the job; and being new to a particular branch and therefore not wanting to risk early relationships with patients. No pharmacists gave ‘lack of interest’ as a reason for non-participation but it may be difficult for pharmacists to say this directly to the researcher and so other reasons may have been given instead. The difficulty of engaging pharmacists in research has been reported by others who found that pharmacists gave similar reasons for non-participation (Gilbert, Mills et al. 2006; Black and Anderson 2009; Stewart, George et al. 2009). It is not clear whether a lack of time, interest or other factors were most important when pharmacists opted out of participation, but it is important that barriers are overcome in order to engage more pharmacists with research and conduct relevant and useful research.

As mentioned above, the desired sample size of patients was not reached. It was planned to cease recruitment when saturation of the data in the patient interviews was reached, but instead recruitment was halted due to time constraints and a need to move on with the study. Although a point of saturation was not reached in patient or pharmacist interviews, the number of new themes emerging was reducing with each interview and no new themes emerged during the last interview analysed. This suggests that the saturation point was near and the data are a valid reflection of the participants' views.

A sample size of eighteen consultations is small but sufficient to provide insight into the communicative processes that occur within pharmacist-patient consultations. The limitation of the sample of consultations collected in this study is the uneven number of consultations collected per pharmacist. This may have resulted in a lack of balance within the data due to particular skills employed by pharmacists with high numbers of consultations. In addition it was not possible to identify trends in communication skills where only one consultation was recorded for a particular pharmacist. Despite the potential bias within the data, the explorative nature of the study produced interesting results and enabled identification of some key aspects of communication within pharmacist-patient consultations.

As discussed in the methodology and methods chapter, the presence of a researcher during a consultation may have influenced the actions of the participants. It is possible that participants tried to perform to the best of their abilities or to display particular characteristics due to the presence of a researcher. Participants may also have felt nervous because they were being observed, which may have affected their behaviour. All participants had been interviewed prior to their consultation by the same researcher performing the observation. In this way the participants knew more about the study and about the researcher. As some rapport had been built during interviews it was hoped that the participants were less nervous and had been reassured about the purpose of the observation.

The researcher was as unobtrusive as possible during consultations in order to minimise influence on the participants. Despite efforts taken to minimise the effects of researcher presence, this cannot be entirely eradicated.

The same researcher conducted all data collection and analysis throughout the study. There were therefore no problems with inter-researcher reliability. However, this may mean that the analysis is biased by the ideas and thoughts of the researcher. In order to check for researcher bias, coding of data was checked by experienced researchers who were satisfied that the coding was accurate.

Despite the above mentioned limitations of the study, a large amount of valuable data were collected and analysed during this study. The multiple methods of data collection mean that although a relatively small sample size of 11 pharmacists and 18 patients were recruited to the study, a total of 70 audio recordings were collected, accompanied by eighteen sets of observational notes which created a large total data set. This study was able to draw on views of both participants in conjunction with the researcher’s notes and recordings of actual consultation data in order to explore the pharmacist-patient consultations from a range of angles. As outlined in the literature review, research of this nature is lacking in pharmacy practice research and the study provides a valuable addition to the field and could be a template for further research.

The consultation recordings are of particular significance to this study. Exploration of the communication skills used within consultations is much more detailed and reliable than participant perceptions alone, and the recordings add enormously to the findings presented here.

This chapter will now report some reflections on the study from the researcher.

7.2 Reflections

This section will present some thoughts on the research process including researcher identity, recruitment to the study and influence on consultations.

7.2.1 Researcher Identity

I am a UK qualified pharmacist with training in communication skills and the teaching of communication skills. I connect strongly with both of these identities and they are important to my perception of my identity. However, it is important to discuss the influence that these characteristics have had on the study. In the first instance, my training as a pharmacist sparked my interest in this research area and the study was designed based on ideas from my background.

These traits had bearing on recruitment of participants to the study. When recruiting pharmacists to the study, I felt that it was important that I introduce myself as a pharmacist and explain that I would therefore have some insight into the pharmacists' background, working environment, training and the consultations that I would be observing. I hoped that this would make the pharmacists feel less anxious when participating in the study as I would understand that not all consultations go according to plan, and that I was not assessing their consultations but exploring what happened during these interactions. This decision was formed by my own feeling that I would rather be researched by someone in the same profession who has an understanding of the role and is supported by others who found that interviews contained richer and more personal accounts of attitudes and behaviours and were broader in scope when the interviewer was recognised as a fellow clinician (Chew-Graham, May et al. 2002). Participants in this GP study reported a 'shared understanding' and 'common language' with the researcher as a fellow GP. It was also important to me that the pharmacists felt able to talk freely to me about their consultations, as well as their training and background, without the need for in-depth explanations of terminology, course structure or other general principles. On reflection at the conclusion of the study, I feel that this was the right decision as far as the pharmacists were concerned. During the pharmacist interviews I have felt that the pharmacists were able to identify with me and felt comfortable in telling me about their situation. I have built up good relationships with the study pharmacists and this has been a successful approach.

However, there have been some difficulties in introducing myself to patient participants. I planned to introduce myself as a researcher but again felt that it was important that patients understood why the research was being undertaken, and therefore informed patients that I was qualified as a pharmacist, but I stressed that I was not currently working as a pharmacist. On some occasions the choice of introduction was removed as the pharmacist introduced me to the patients. This was mostly as a pharmacist doing research but occasionally as a researcher or just by name. When introducing myself to patients as described above, there was sometimes confusion from the patients over separation of my role from that of the pharmacist conducting the consultation. Some patients asked me questions either about their appointment or other matters relating to their medicines. I was then faced with the difficulty of trying to deflect questions where possible by referring the patient to the pharmacist they were consulting with. On a few occasions this was not possible and I answered the patient's questions. I felt uneasy doing this as this was not part of my role but if patients persisted after I had tried to deflect questions, there was little choice without appearing rude and risking the rest of the data collection. I gave as brief answers as possible and only answered general questions giving no pharmaceutical advice. At these times I found it hard to distance myself from my role as a pharmacist. Other researchers have also experienced patients asking clinical questions of a researcher they knew to be medically qualified (Richards and Emslie 2000). The majority of patients to whom I introduced myself in this way only identified with me as a pharmacist and not as a researcher.

After identification of these difficulties I introduced myself as a researcher and did not describe my background or qualifications. In these instances, all patients asked me about my background, my training, my goals for the future and where the research would lead. I did not wish to lie to patients and therefore all patients knew that I was a pharmacist during the data collection. This means that some patients still struggled with the same difficulty in separating out my role from that of the pharmacist that they were consulting with.

The confusion became clear during patient interviews, when I asked patients, for example, how much information they had received prior to their appointment; the patients would often cite the study information that had been given to them and not consultation related information. Even when I explained to patients how to separate out my role, they had difficulty in doing so. This may have been for two reasons: firstly that they knew that I was also a pharmacist and secondly, that having an appointment with a pharmacist is an unusual event. As the whole experience was new to many patients, some viewed the research and consultation as a single and combined event. If I had been conducting the same study surrounding a GP appointment, patients would know that my presence and my involvement was not the usual procedure and would therefore have been more able to separate out my role. Having appointment-based clinic-style consultations with a pharmacist is still very new to patients and as most patients have not previously attended such an appointment, the process was unclear to them.

My identity as a pharmacist, and my knowledge of communication skills, also influenced the way in which I was able to collect, analyse and explore the data. For example the questions asked during interviews, and the observations made during consultations, may have been different if made by a researcher without this background. I feel that my background supported my ability to collect data relevant to the pharmacists and their practice and to understand how the communication fitted in with the context. However, it is important to note that my identity would have influenced participants' responses during interviews. This has been discussed previously in the methodology and methods chapter of this thesis but will be briefly explored again here.

Firstly, during pharmacist interviews, it was hoped that being researched by a fellow pharmacist would facilitate free-flowing conversation, as described above, and that my understanding of the pharmacists' role would allow for more in depth discussion. However, pharmacists may have felt nervous that I would judge their 'performance' in both interview and consultations according to my own knowledge. This may have resulted in pharmacists offering pre-emptive explanations for any negative judgements that may be made on their practice or comments. Both groups of participants may have been keen to appear supportive of the main focus of the research by offering more positive comments about communication.

During patient interviews, my status as a pharmacist may have caused patients to give more positive comments about their past and current experiences with pharmacists. In addition, conducting the interviews directly after the consultation may have made it difficult for patients to give negative comments about the communication within their consultation. The participants were also keen to be 'useful' to the research and some apologised for not taking enough medicines or thought their case was not interesting enough to be studied. This has also been found by other researchers (Richards and Emslie 2000).

My background as a pharmacist, and my knowledge of communication skills also influenced my analysis of the data. Whilst I explored the data with an open mind and looked for themes to emerge from the data, my interpretations are inevitably influenced by my past experiences and interests. I have tried to remain open and honest throughout my analysis in order to allow readers to make their own interpretations of the findings presented throughout this thesis.

7.2.2 Influence on Consultations

The potential influence of researcher presence on participant behaviour has been discussed in the methodology and methods chapter of this thesis. This section will present views of such effects on the consultations observed.

In order to minimise my effect on consultations I wore neutral, smart clothes and positioned myself an unobtrusively as possible in the consultation room. I also attempted to build rapport with both pharmacists and patients prior to the consultations by creating a friendly and approachable atmosphere during interviews. In this way I hoped that both participants would feel relaxed and comfortable during the consultations. I felt that this atmosphere was achieved in all except one interview and associated consultation. This one patient was quite anxious during the initial interview and there was a marked reduction in how chatty and open she was as soon as the recorder was switched on. I was aware that the patient felt nervous and tried to reassure her. She did relax as the interview proceeded but there was still an awareness of the recorder. As the consultation began I felt that both pharmacist and patient were aware of my presence and that of the recording device. Both participants would nod or look towards the recorder or myself when saying something that they felt would interest me or my research. I found it difficult to maintain close observation and spent more time writing notes and looking down than in any other consultation to remove the feeling of my focus from the participants. The patient was more relaxed during the post-consultation interview. The patient had attended previous consultations with the pharmacist and so it is unlikely that she was nervous about the consultation itself. Unfortunately this was the only consultation observed for this pharmacist and so the atmosphere cannot be compared with other consultations. The pharmacist showed no nerves or anxiety during interviews and was confident about involvement in the study. However during the follow up interview, the pharmacist reported that he had felt self-conscious and aware of being recorded throughout the consultation. He felt that this had not changed the content of the consultation, but may have hindered his communication due to feeling nervous. He felt this was because it was the first time he had been observed or recorded and was confident that these feelings would have resolved quickly if it had been possible to recruit more patients.

The difficult atmosphere was obvious in this consultation and did reassure me that I had not exerted such an influence on other consultations where little or no regard had been given to the recorder or to me, as intended. In addition, no other pharmacists reported feeling self-conscious during the consultation in their follow up interviews and some reported that they were used to having students observing them and so were not worried about my presence. I am therefore more confident that my influence was minimal on the other consultations.

During the remaining consultations, I found it easy to remain in the background and observe the consultation from a distance. On some occasions the participants would include me in a comment by looking in my direction and these were always comments not related to the main task of the consultation, for example the weather or difficulties with the bus. There was only one instance where I found it difficult to remain a non-participant. This was due to a misunderstanding between the pharmacist and the patient over the quantity of a painkiller that the patient hoped to receive.

Although this could potentially cause frustration or difficulty to the patient, there would be no harm as a result and I therefore did not act. This was a difficult moment but my aim was to influence the consultation as little as possible. I feel that my presence during the consultations had a minimal effect overall.

This chapter will now move on to describe the main conclusions of this study and their implications.

7.3 Conclusions and Implications

This study aimed to explore the communication that occurs between pharmacists and patients during clinic-style consultations. The specific objectives of this study were:

1. To explore the communication that occurs during pharmacist-patient clinic-style consultations and to examine the communication skills used by pharmacists within these interactions.

2. To investigate pharmacists' views of the learning and use of communication skills within pharmacy, particularly with patients.

3. To investigate patients' perceptions and experiences of pharmacy.

4. To investigate patients' perceptions of their consultation to include aims, expectations and outcomes and particularly to explore patients' perceptions of the communication within the consultation.

This study has met the above aim and objectives and the findings are set out in this section. The conclusions and implications of this research are presented in relation to the field of research, teaching and finally implications for practice.

7.3.1 Conclusions and Implications for Research

This study set out to explore the communication that occurred within pharmacist-patient consultations from a range of perspectives, including that of the patient. **One of the key findings from this study is the difficulty in obtaining detailed data relating to specific communication skills from patient participants.** The patients interviewed found it difficult to identify precise communication skills and the majority had not noticed such skills during their consultation. The patients found it hard to answer open questions about communication skills and when asked specific questions about certain skills, most patients did not give detailed answers. This indicates that even when prompted, the patients in this study did not recollect communication in detail, which suggests that asking participants about the communication skills of their pharmacist may not be a reliable method for researching in this area.

This study has made use of multiple research methods in order to explore pharmacist-patient consultations in a greater depth that is achievable by single methods. **The combination of methods used was successful at accessing detailed data that show use of communication skills and an understanding of patient perceptions of the factors influencing consultations.** Common themes were found throughout the data from all methods which allowed contrast and comparison of the data. Some themes were supported by the data in all areas which strengthens the validity of the results. An example is the importance of social conversation. This topic emerged in both the pharmacist and patient interviews and both groups of participants reported that social conversation was important in building relations and facilitating communication between pharmacists and patients. That both groups voiced similar opinions supports the theme. In addition, the recorded consultation data further corroborates this finding as the data show large proportions of the consultations were devoted to social conversation. **The availability of data from multiple methods, both observation and interviews, and from multiple participants, both pharmacists and patients, suggests that the importance of social conversation is a significant and valid theme. Interestingly, this was not a skill specifically covered by the Calgary-Cambridge guide. The ability to draw on**

different data sources strengthens the suggestion to amend the guide to include social, non-medical conversation as a specific skill.

Not all themes were found to be supported by all sources of data. For example, during the pharmacist interviews, it was reported that pharmacists felt that checking patient understanding was critical in conducting patient consultations and that this was performed regularly during such interactions. However, in contrast, the recorded consultation data show that the pharmacists observed did not routinely check patients' understanding during consultations. The Calgary-Cambridge guide sets out several skills for checking patient understanding and places high importance on this aspect of the consultation. This disparity may mean that pharmacists had skewed perceptions of their own performance, or could indicate that the reports given during the interviews were influenced by the interview setting and the research agenda, where participants may present a 'better' view of themselves. **The use of triangulation in this context is invaluable as it allows more considered interpretation of the pharmacists' reports.** If pharmacists are unaware of their lack of demonstration of these communication skills, then an important area for future teaching is identified here, both in self-reflection and learning of skills.

The emergence of repeated themes throughout the data sets again adds to the validity of the results by supporting and embellishing each theme. Additional perspectives can be added to interpretation of the data and this is a major strength of the research presented here.

This would be an appropriate combination of methods to investigate further aspects of communication skills or other consultation characteristics. Video recordings could have been used in this study to provide more detailed data on non-verbal aspects of the consultation but for the exploratory nature of this research, the amount of data would have been difficult to manage. Use of video when researching particular aspects of communication could provide additional depth to the analysis if participants are comfortable with its use.

Audio recordings of consultations provided sufficiently detailed data to allow in depth analysis of the communication that occurred during each interaction. The communication skills used could be identified from the individual transcripts, and this study employed two methods of analysis. This data would also be suitable for analysis using a range of additional methods. The importance of accessing actual consultation data is highlighted by this research. This study supplemented analysis of the consultation data with observational notes which enabled contextualisation of the recordings. During the consultation, points of particular interest could be noted down for later investigation and anything that was unclear from the tape could be checked with the notes during analysis. In addition, factors influencing the consultation, such as computer problems or late-running of a clinic, could be recorded for consideration during analysis. This helped in interpreting the communication recorded during each consultation.

Recruitment of patients to this study was complicated by a number of factors, as previously discussed. One of the main problems in community pharmacy was that consultations were not appointment based which limited the scope of this study. **In order to assess clinic-style consultations in future studies which aim to include collection of direct consultation data, it may be necessary to negotiate ethical approval that does not require patients to be given 24 hours notice to consider their involvement in the study.** This could perhaps include a cooling off period, prior to inclusion of data in analysis, for patients to withdraw their data from the study. Recording consultations on an opportunistic basis may result in increased patient numbers but could remove the possibility for interviewing patients before their consultation. These interviews were a valuable source of data exploring patient expectations of consultations and so requirement of this type of data would need consideration before adapting the study procedure.

Application of the Calgary-Cambridge guide to communication within consultations was a useful tool in the analysis of the audio-recordings. The tool was thorough and detailed enough to distinguish between specific skills that the pharmacists used. The tool helped to identify skills that were used well and those that were under-used during the consultations recorded. Some alterations to the guide were suggested in order to tailor the guide more specifically to pharmacist-patient consultations, which could make this guide an exceptional tool for further analysis of pharmacist-patient communication. Communication skills research in pharmacy practice does not currently use a standard tool to assess communication. The Calgary-Cambridge guide is adaptable to suit many research situations by using different skill sub-sets to match the aims of the research. Association of pharmacy practice research with a single dominant assessment tool could help to focus research in this area and help results to translate into different areas of research.

Overall the methods used in this study provide a successful approach to gathering detailed data about pharmacist-patient communication during consultations and could be used in future studies which aim to investigate pharmacists' communication.

7.3.2 Conclusions and Implications for Pharmacist Training and Education

The pharmacists interviewed in this study reported that they did not receive sufficient effective communication skills training at university during the pharmacy undergraduate degree. It is important to remember that comments given during interviews are given based in a specific context and are influenced by many factors associated with that context. For example pharmacists may report that they did not receive sufficient training in order to deflect any negative perception of them if their communication skills were poorly judged. Alternatively, the pharmacists may feel that the interviewer is seeking to find that such training needs to be improved, and therefore may answer with what they believe the interviewer wants to hear. In addition, the pharmacists were being asked about events from their past which they may not remember well. Poor memory of training may mistakenly suggest to the pharmacists that their training was lacking in quality or quantity. However, the strength of pharmacist opinions suggests that this may be a true reflection of their feelings towards previous communication skills training. Despite this, the pharmacists communicated well during the recorded consultations and used a wide range of communication skills.

The pharmacists recruited to this study had been qualified for a range of years and studied at a variety of universities; it is therefore unlikely that they received similar training on communication skills. Several key themes to consider when planning communication skills teaching for pharmacists emerged from the data. The variety in experience and training of the pharmacists interviewed suggests that these themes are not restricted to particular groups of pharmacists.

The results indicate that teaching of communication skills should be incorporated at an early level in the careers of pharmacists and should begin during undergraduate studies in order that new pharmacists are furnished with the required skills. However it is important that training continues in early practice to allow pharmacists the opportunity to try out and refine their communication techniques. **The results indicate that lecture-style teaching of communication skills is not effective, rather sessions should be practical with opportunity to practise, in a supportive environment, with tailored feedback that facilitates the refinement and uptake of new and existing skills, and ultimately their use in practice. Such sessions should be supported by evidence-based teaching to improve understanding of the skills in use. The pharmacists reported that observation of real patient encounters, again with tailored feedback, is essential if pharmacists are able to fully incorporate new skills.** Additional training later in the careers of pharmacists would be welcome but must be targeted and time-effective and could perhaps be combined with training for additional roles, such as MURs or diagnostic testing, to ensure that pharmacists receive the maximum benefit from any future training.

The data support the place of expert feedback in addition to peer-review as this emphasises the importance of the learning to the student, and provides more effective feedback. **A key element of learning communication skills was reported to be repetition, with time to rehearse and improve particular skills before moving on.** Further to this, the teaching of consultation skills should be broken down into coherent and distinct sections. Students are unable to give sufficient focus to any particular element if they are attempting to learn consultation skills as a whole. As previously discussed, practitioners often find it difficult to integrate content and process skills during consultations and it is important that teaching incorporates both skill sets to facilitate this integration. Care must be taken to ensure that these areas are balanced within teaching. For example, if students are learning a challenging new clinical topic, they may be unable to focus on the process skills. **With this in mind, an initial period with a focus on the place of communication skills within pharmacy would be useful to introduce the course; this should be followed by integrated teaching that allows learners to give equal attention to the content and process of communication. Assessment should not prioritise clinical or content skills in order to maintain the learners' appreciation of the importance of process-based skills.**

The key elements to underpin the teaching of communication skills should be integration of knowledge and skills utilising evidence based teaching, practise, observation of real encounters and tailored feedback.

The Calgary-Cambridge guides could be built in to future communication skills teaching. The C-C guide could provide fluency between research and teaching which could help both students and practitioners to improve their practice by facilitating integration of the most recent research findings.

7.3.3 Conclusions and Implications for Pharmacy Practice

A number of findings from this study could influence the use of communication skills in practice. One of the key themes to emerge from the data was the importance of building relationships. **Both pharmacists and patients reported that building relationships is beneficial to the consultation, and influences the communication skills that are used during interactions.** In addition to participant reports, much of the content of the consultations was based around social conversations that support the building of rapport and forging relationships. Trust was found an important aspect of relationships and patients were able to identify some specific communication skills that were essential to ensure that the information delivered was perceived to be trustworthy. **It is particularly noteworthy that patients identified specific communication skills related to trust due to difficulty in describing communication skills in general. This indicated the importance of trust within the**

pharmacist-patient interaction. Trust is important in many relationships, but particularly in health care relationships. The stakes are high in this context and patients must be able to confidently follow advice that they have been given, whilst practitioners must be sure that they have received all the relevant information. **Patients reported that both long term relationships and short term rapport can ease communication and further enhance the approachability and accessibility of a pharmacist.** Building rapport could be particularly important for busy city centre pharmacies or locum pharmacists who may interact with a large number of patients without the opportunity to build long-term relationships. Helping pharmacists to understand the importance of building trust and rapport during interactions with patients, particularly during single consultations, could improve communication considerably.

The location of consultations was also an important theme to emerge from the data. **The participants reported that location has important effects on the communication within consultations.** Both pharmacists and patients valued privacy in enabling open and honest consultations, particularly in community pharmacy. However, many consultation rooms in community pharmacy are not routinely used, which can lead to stigma associated with their use. The data suggest that this can inadvertently inhibit communication by dissuading patients from requesting a private consultation. **Having a dedicated consultation room or area is important in facilitating communication and creating an atmosphere conducive to consultations**, but the data suggest that keeping the space reserved for consultations is not always achievable. It is important that consultation rooms are used solely for consultations and not used for purposes such as storing stock. In order to improve the image and use of consultation areas, pharmacists could incorporate the consultation area in to routine interactions so that privacy is automatically provided and patients don’t have to request this facility. The use of acoustic barriers at the pharmacy counter in community pharmacies could provide an alternative solution to providing privacy in a more accessible way. Routine use of consultation areas will also help to reduce stigma and encourage patient access of this facility as they will be comfortable and familiar with its use. By associating a well-presented and dedicated space with consultation-based services, pharmacists may be able to increase the profile of services such as MURs and other clinic-style consultations. If patients can identify with such a space, they may feel more able to communicate freely during clinic-style consultations and other interactions.

The use of computers within consultations was another key theme to emerge from the data. The patient interviews suggest that patients are satisfied with the use of computers during consultations. This may be due to the increased prevalence of computers in many day to day situations and in other health care consultations for example, doctors, opticians or dentists, and thus increased familiarity with computers. Some patients also reported that the computers were useful and ensured that the pharmacist had access to all the relevant information or aided patient understanding of the information provided. Computer programmes were also used to add structure to consultations. However the use of computers also appeared to interfere with the flow of communication in the consultation, and limit recording of patient data. **Observational data suggest that eye contact was limited by use of a computer, and the audio recordings suggest that, in some cases, the patient narrative was interrupted or truncated in order to adhere to the format provided by a computer based protocol.** Computers can be used to provide access to a wealth of information and to streamline and facilitate a large number of processes and their use in pharmacy could provide a range of benefits. However, it is important that pharmacists are able to use computers effectively during consultations. For example, if pharmacists are able to ensure that computer use stays in the background of the consultation whenever the computer is not specifically being used in collaboration with the patient, then communication with the patient may be more free-flowing and eye contact could be maintained. It is also important that designers of software for use in consultations take the time to get feedback from users so that programmes may be tailored to provide the best service possible. Pharmacists may need additional training to help regain control over the role of computers in the consultation.

On a related theme, the importance of methods to structure consultations was a significant topic to emerge from the data. The data suggest that pharmacists used a range of methods to structure consultations. This was an area that pharmacists reported to be lacking in training and it is interesting that pharmacists have developed and adopted a number of methods. The methods observed included: following an externally provided protocol or guideline, such as MUR record forms, either in paper or electronic formats; mental checklists; PMRs; bullet point notes; and rehearsed fragments of script. Professionals inevitably develop verbal routines over time for regular tasks and this allows cognitive focus on more complex aspects of the consultation. The data suggest that the use of such routines does not negatively affect communication and therefore if pharmacists are able to develop such routines, and apply them in an appropriate way, this could be a useful method to add structure to consultations. The data suggest that other methods of structuring had a range of effects. Adhering to more rigid structures ensured that all the required topics were covered and gave clear structure to the consultation, but left little room for adaptation to create a more patient-centred consultation. Using less rigid guides, or following a guide more loosely, allowed for tailoring of consultations but did not always prompt for certain points to be addressed. **The data suggest that if pharmacists have lacked prior training on how to structure consultations, they have found a range of methods to help guide their interactions.** The methods have various benefits and drawbacks but it is important that whichever method is selected, pharmacists are confident at deviating from their chosen structure when required in order to accommodate the patient’s needs. Future training may be required to help pharmacists achieve the best from their chosen method or suggest alternatives for use in different contexts.

The final key finding to emerge from the data are a range of skills that were under-represented or poorly used during the pharmacist consultations; these skills primarily relate to the skills required for conducting patient-centred consultations. **The skills not satisfactorily used include eliciting the patient’s agenda, thoughts, beliefs and concerns, actively encouraging questions, checking patient understanding and using open questions.** These skills form part of a key set of skills that facilitate patient participation in consultations, and help to achieve the best possible outcomes for each individual patient. It is of concern that pharmacists are not using these skills but may be explained by the relatively recent focus on a patient-centred approach to consultations. This may mean that such skills were not included in training at the time that the study pharmacists were students. Adopting a patient-centred style of consultation can take many forms, and pharmacists again may need additional training or support in finding their own way to include these skills within consultations. If patients are to gain the maximum value from pharmacist-led consultations, and pharmacists' roles in this service type are to increase, it is important that they are able to effectively use the communication skills required in order to conduct patient-centred consultations.

7.4 Future Work

This thesis has reported a number of important findings that have been highlighted throughout this chapter but it has also generated a number of areas for future investigation and these are summarised here.

This study has highlighted the importance of using direct recordings of consultation data in analysis. Interactional analysis such as conversation or discourse analysis would provide alternative explorations of consultation data and could further investigate many of the topics discussed here such as the influence of structure and computers on the communication process.

There is a lack of pharmacy practice research related to the use of computers within consultations. Investigations exploring these effects would greatly enhance the current body of literature. Studies using video recording of the consultation in combination with screen capture data from the computer, could generate detailed analysis of which aspects of computer use benefit the consultation, and which may disrupt communication.

A key area for further investigation is the influence of location on pharmacist-led consultations. A large quantitative study researching consultation rooms in community pharmacy could assess how widespread the issues discovered in this study are. Of particular relevance would be investigation of multiple uses of consultation rooms, frequency of use, types of consultation conducted and how identifiable the consultation area is to patients.

In relation to the above point, a comparative study comparing direct consultation data from private consultation areas with consultations conducted in more open areas would allow direct analysis of the influence of location on the communication skills used during the interactions. This could also enable comparison of the communication skills used during planned or spontaneous interactions.

This study has identified the Calgary-Cambridge guides as applicable to pharmacist-patient consultations, but has suggested some alterations to tailor the guide. Creation and validation of a pharmacy specific version of the guides would allow promotion of the tool for a more unified approach to research and teaching of communication skills within pharmacy practice.

Finally, investigation of the communication skills teaching at pharmacy undergraduate level would help to identify different teaching practices and inform future development of communication curricula. This would be timely research due to the number of new schools of pharmacy opening recently.

To conclude, this novel study has investigated the communication that occurs between pharmacists and their patients and has presented a range of findings from actual consultation data, supported by participant perceptions and observational notes. The findings show that pharmacists are communicating to a high standard within consultations but a number of areas for improvement and further investigation have been identified. There might be benefits to patients if pharmacists develop and use communication skills that involve greater use of open questions, eliciting the patient’s agenda and exploration of patient thoughts, feelings and expectations. Pharmacists could make use of relationships and rapport to improve communication within consultations, but should be aware of the influence of factors such as location, structure and computers on the consultation.

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Appendix 1. Literature Search Strategy

The initial literature search was conducted in 2006 and included literature published between 1980-and 2006, and in English language. The search used the terms below which were combined into the three groups shown:

- Pharmacist
- Pharmacy
- Pharmaceutical

- Patient
- Client
- Customer

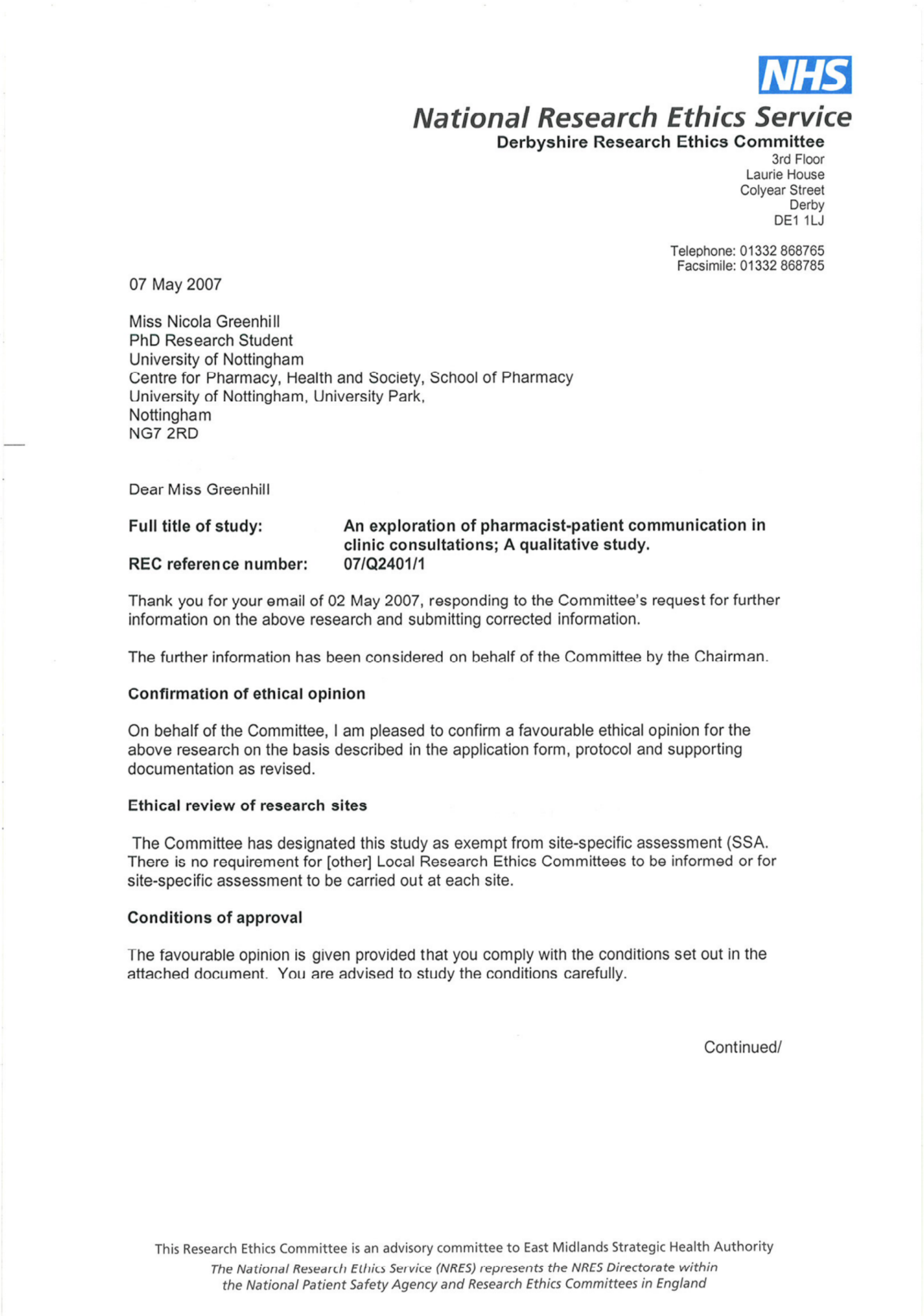
- Communication
- Interaction
- Counselling (+ Counseling)
- Consultation

The results of the three groups were then combined to find references matching all three groups. References from the field of communications technology were excluded to narrow the results as this study is not concerned with computer programming or telecommunications. The following databases were searched:

- Medline
- Embase
- PsycINFO
- Scopus

Key journals from the field of pharmacy practice and health care communication were also hand searched to locate relevant articles. In addition a hand search of the references cited by the key resulting publications was conducted. The search was updated during data analysis in 2009-2010.

Appendix 2. Ethical and Research & Development Approval Letters



NHS
National Research Ethics Service
Derbyshire Research Ethics Committee
3rd Floor
Laurie House
Colyear Street
Derby
DE1 1LJ

Telephone: 01332 868765
Facsimile: 01332 868785

07 May 2007

Miss Nicola Greenhill
PhD Research Student
University of Nottingham
Centre for Pharmacy, Health and Society, School of Pharmacy
University of Nottingham, University Park,
Nottingham
NG7 2RD

Dear Miss Greenhill

Full title of study: **An exploration of pharmacist-patient communication in clinic consultations; A qualitative study.**
REC reference number: **07/Q2401/1**

Thank you for your email of 02 May 2007, responding to the Committee's request for further information on the above research and submitting corrected information.

The further information has been considered on behalf of the Committee by the Chairman.

Confirmation of ethical opinion

On behalf of the Committee, I am pleased to confirm a favourable ethical opinion for the above research on the basis described in the application form, protocol and supporting documentation as revised.

Ethical review of research sites

The Committee has designated this study as exempt from site-specific assessment (SSA. There is no requirement for [other] Local Research Ethics Committees to be informed or for site-specific assessment to be carried out at each site.

Conditions of approval

The favourable opinion is given provided that you comply with the conditions set out in the attached document. You are advised to study the conditions carefully.

Continued/

Approved documents

The final list of documents reviewed and approved by the Committee is as follows:

Document	*Version*	*Date*
Application		13 December 2006
Investigator CV		
Protocol	2	31 January 2007
Covering Letter		15 December 2006
Letter from Sponsor		07 December 2006
Peer Review		12 December 2006
Compensation Arrangements		08 August 2006
Interview Schedules/Topic Guides	1 Pharmacist Interview 1	12 December 2006
Interview Schedules/Topic Guides	1 Pharmacist Interview 2	12 December 2006
Interview Schedules/Topic Guides	1 Patient Interview 1	12 December 2006
Interview Schedules/Topic Guides	1 Patient Interview 2	12 December 2006
Letter of invitation to participant - clinic	1 inc reply slip	12 December 2006
Letter of invitation to participant - patient	1 inc reply slip	12 December 2006
Participant Information Sheet: Patient	2	31 January 2007
Participant Information Sheet: Pharmacist	2	31 January 2007
Participant Consent Form: Patient	2	31 January 2007
Participant Consent Form: Pharmacist	2	31 January 2007
Response to Request for Further Information		23 April 2007
Response to Request for Further Information		02 May 2007
Guidelines for Lone Working		2003
Academic supervisor's CV		

R&D approval

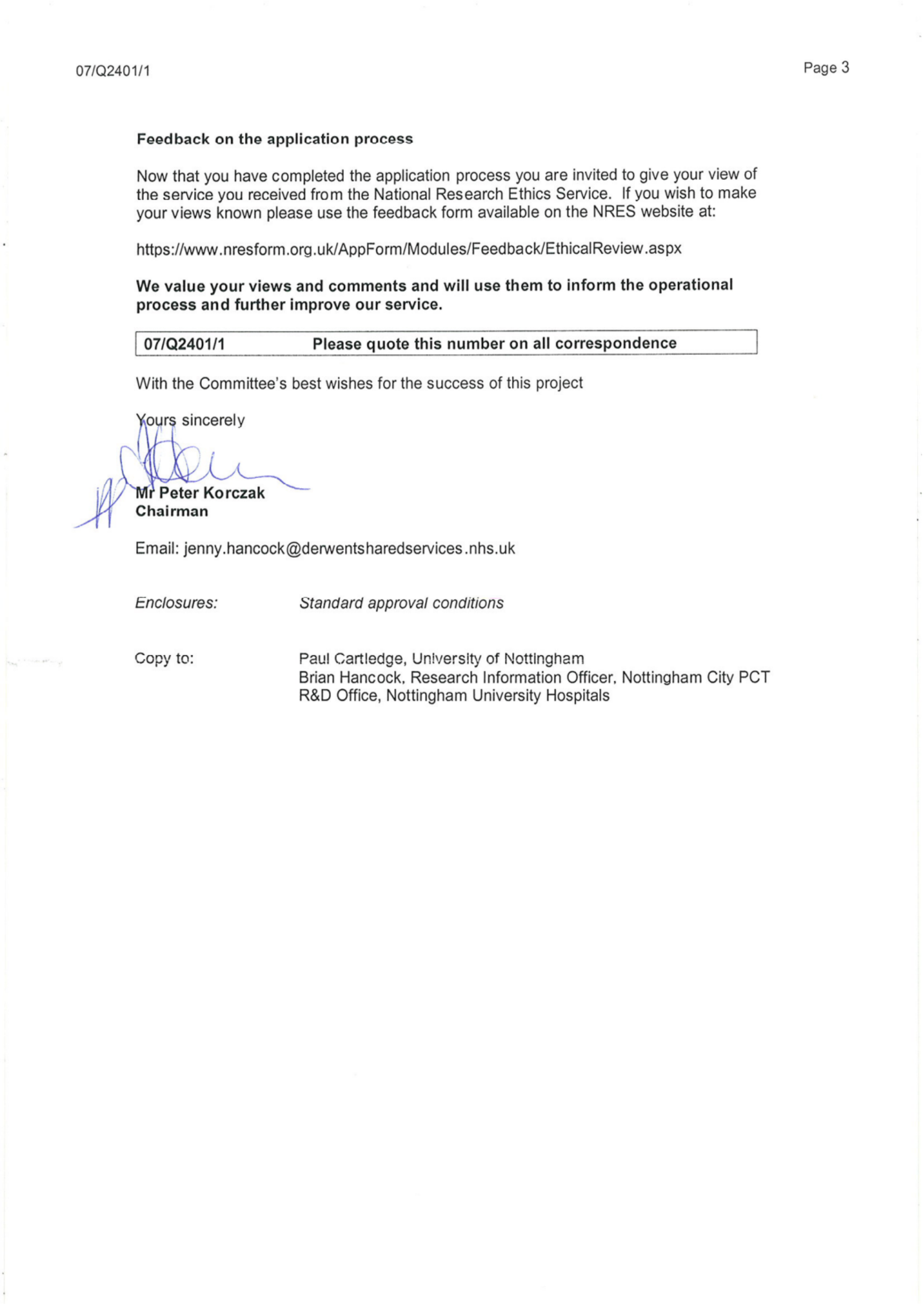
All researchers and research collaborators who will be participating in the research at NHS sites should apply for R&D approval from the relevant care organisation, if they have not yet done so. R&D approval is required, whether or not the study is exempt from SSA. You should advise researchers and local collaborators accordingly.

Guidance on applying for R&D approval is available from http://www.rdforum.nhs.uk/rdform.htm.

Statement of compliance

The Committee is constituted in accordance with the Governance Arrangements for Research Ethics Committees (July 2001) and complies fully with the Standard Operating Procedures for Research Ethics Committees in the UK.

Continued/



Feedback on the application process

Now that you have completed the application process you are invited to give your view of the service you received from the National Research Ethics Service. If you wish to make your views known please use the feedback form available on the NRES website at:

https://www.nresform.org.uk/AppForm/Modules/Feedback/EthicalReview.aspx

We value your views and comments and will use them to inform the operational process and further improve our service.

07/Q2401/1	**Please quote this number on all correspondence**

With the Committee's best wishes for the success of this project

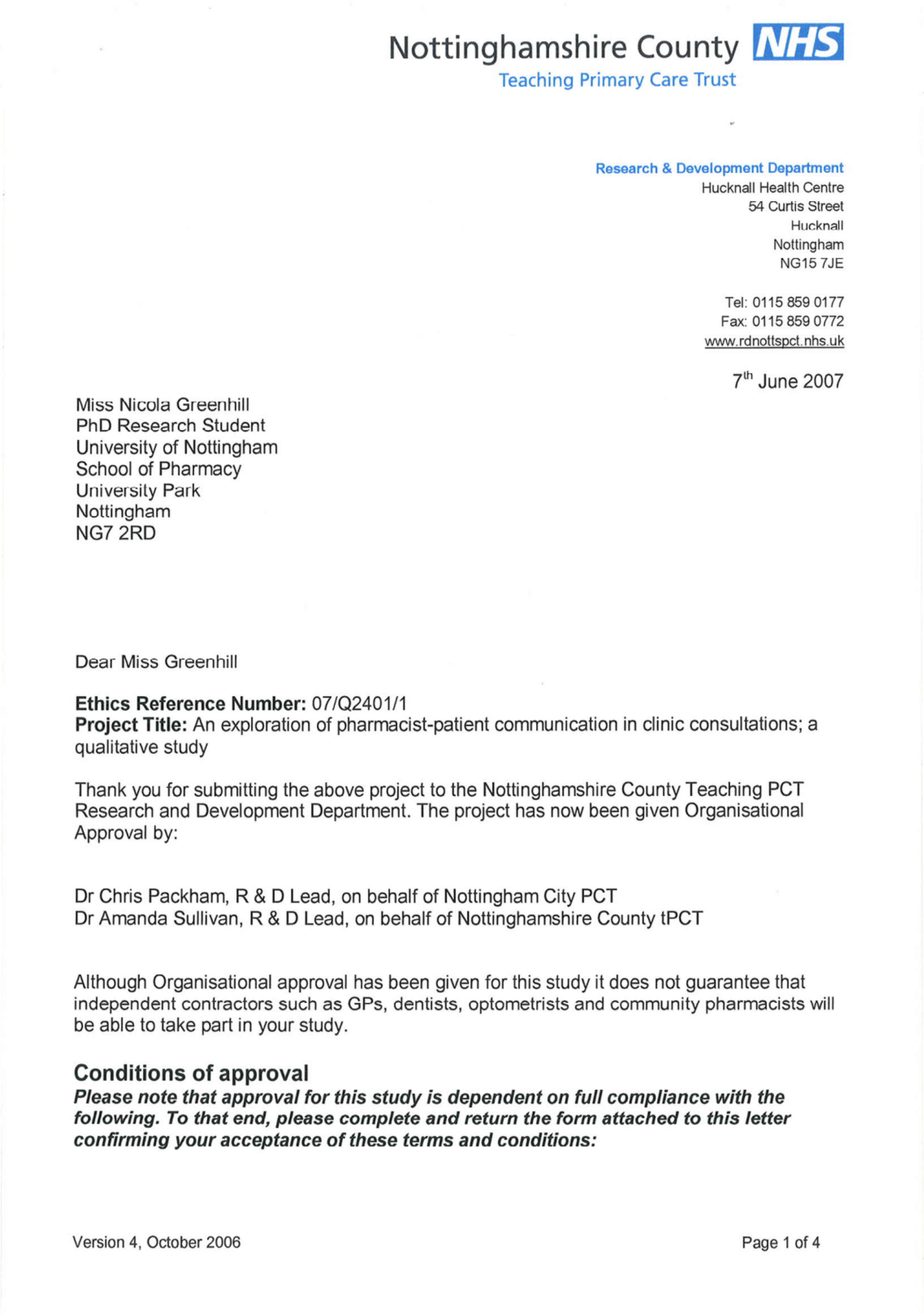
Yours sincerely

Mr Peter Korczak
Chairman

Email: jenny.hancock@derwentsharedservices.nhs.uk

Enclosures: *Standard approval conditions*

Copy to: Paul Cartledge, University of Nottingham
Brian Hancock, Research Information Officer, Nottingham City PCT
R&D Office, Nottingham University Hospitals



Nottinghamshire County NHS
Teaching Primary Care Trust

Research & Development Department
Hucknall Health Centre
54 Curtis Street
Hucknall
Nottingham
NG15 7JE

Tel: 0115 859 0177
Fax: 0115 859 0772
www.rdnottspct.nhs.uk

7th June 2007

Miss Nicola Greenhill
PhD Research Student
University of Nottingham
School of Pharmacy
University Park
Nottingham
NG7 2RD

Dear Miss Greenhill

Ethics Reference Number: 07/Q2401/1
Project Title: An exploration of pharmacist-patient communication in clinic consultations; a qualitative study

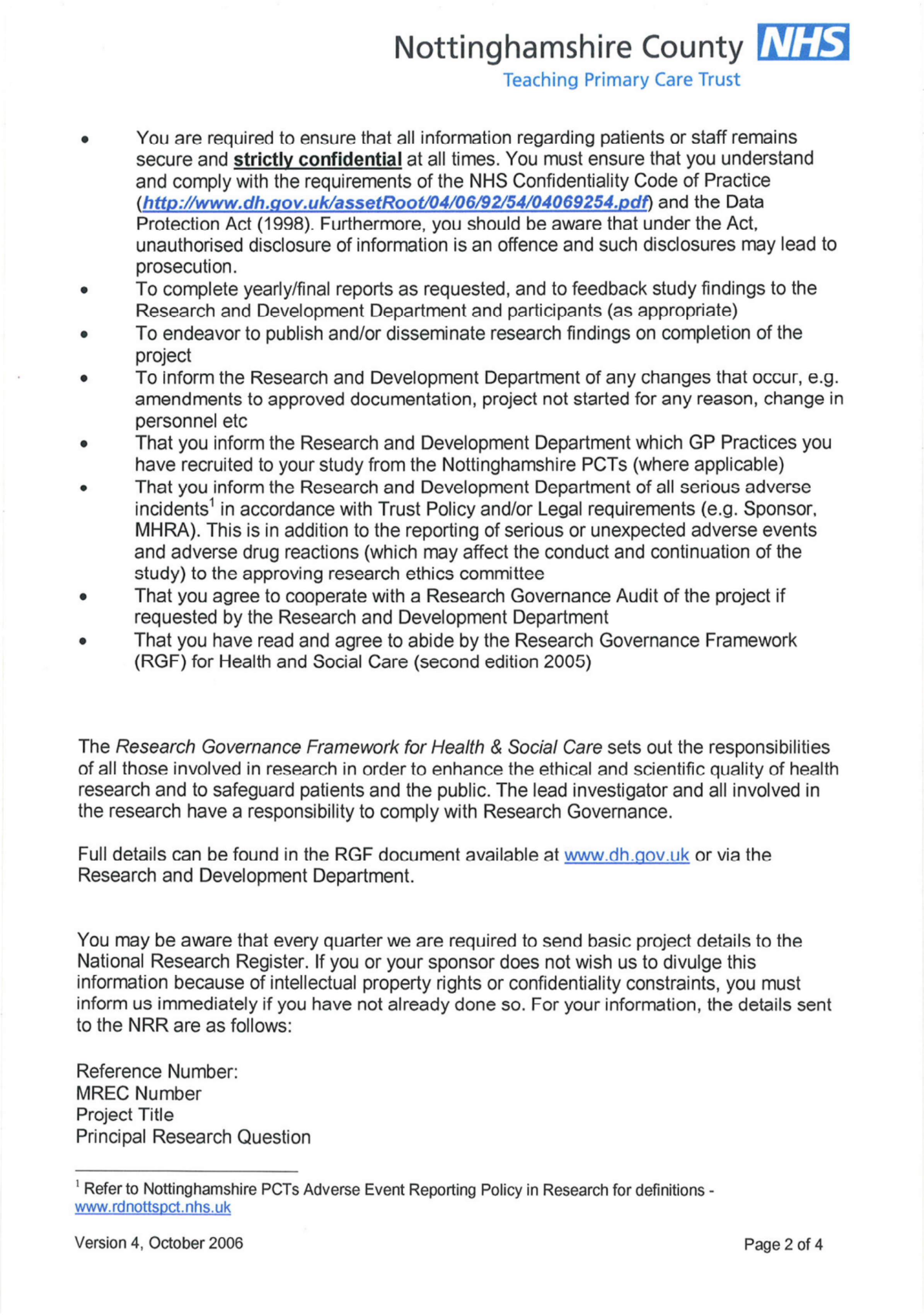
Thank you for submitting the above project to the Nottinghamshire County Teaching PCT Research and Development Department. The project has now been given Organisational Approval by:

Dr Chris Packham, R & D Lead, on behalf of Nottingham City PCT
Dr Amanda Sullivan, R & D Lead, on behalf of Nottinghamshire County tPCT

Although Organisational approval has been given for this study it does not guarantee that independent contractors such as GPs, dentists, optometrists and community pharmacists will be able to take part in your study.

Conditions of approval

Please note that approval for this study is dependent on full compliance with the following. To that end, please complete and return the form attached to this letter confirming your acceptance of these terms and conditions:



- You are required to ensure that all information regarding patients or staff remains secure and **strictly confidential** at all times. You must ensure that you understand and comply with the requirements of the NHS Confidentiality Code of Practice (***http://www.dh.gov.uk/assetRoot/04/06/92/54/04069254.pdf***) and the Data Protection Act (1998). Furthermore, you should be aware that under the Act, unauthorised disclosure of information is an offence and such disclosures may lead to prosecution.
- To complete yearly/final reports as requested, and to feedback study findings to the Research and Development Department and participants (as appropriate)
- To endeavor to publish and/or disseminate research findings on completion of the project
- To inform the Research and Development Department of any changes that occur, e.g. amendments to approved documentation, project not started for any reason, change in personnel etc
- That you inform the Research and Development Department which GP Practices you have recruited to your study from the Nottinghamshire PCTs (where applicable)
- That you inform the Research and Development Department of all serious adverse incidents[1] in accordance with Trust Policy and/or Legal requirements (e.g. Sponsor, MHRA). This is in addition to the reporting of serious or unexpected adverse events and adverse drug reactions (which may affect the conduct and continuation of the study) to the approving research ethics committee
- That you agree to cooperate with a Research Governance Audit of the project if requested by the Research and Development Department
- That you have read and agree to abide by the Research Governance Framework (RGF) for Health and Social Care (second edition 2005)

The *Research Governance Framework for Health & Social Care* sets out the responsibilities of all those involved in research in order to enhance the ethical and scientific quality of health research and to safeguard patients and the public. The lead investigator and all involved in the research have a responsibility to comply with Research Governance.

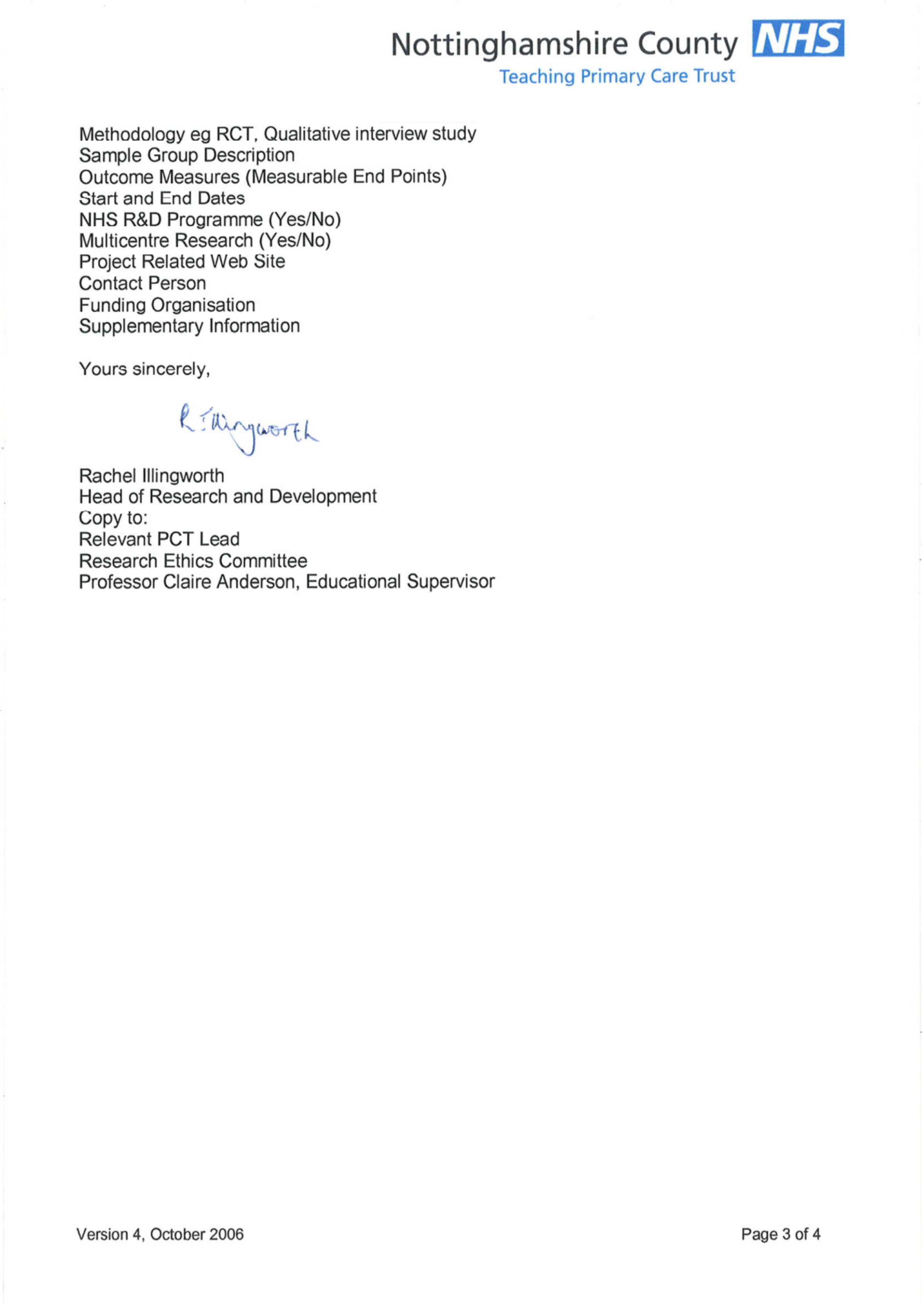
Full details can be found in the RGF document available at www.dh.gov.uk or via the Research and Development Department.

You may be aware that every quarter we are required to send basic project details to the National Research Register. If you or your sponsor does not wish us to divulge this information because of intellectual property rights or confidentiality constraints, you must inform us immediately if you have not already done so. For your information, the details sent to the NRR are as follows:

Reference Number:
MREC Number
Project Title
Principal Research Question

---

[1] Refer to Nottinghamshire PCTs Adverse Event Reporting Policy in Research for definitions - www.rdnottspct.nhs.uk

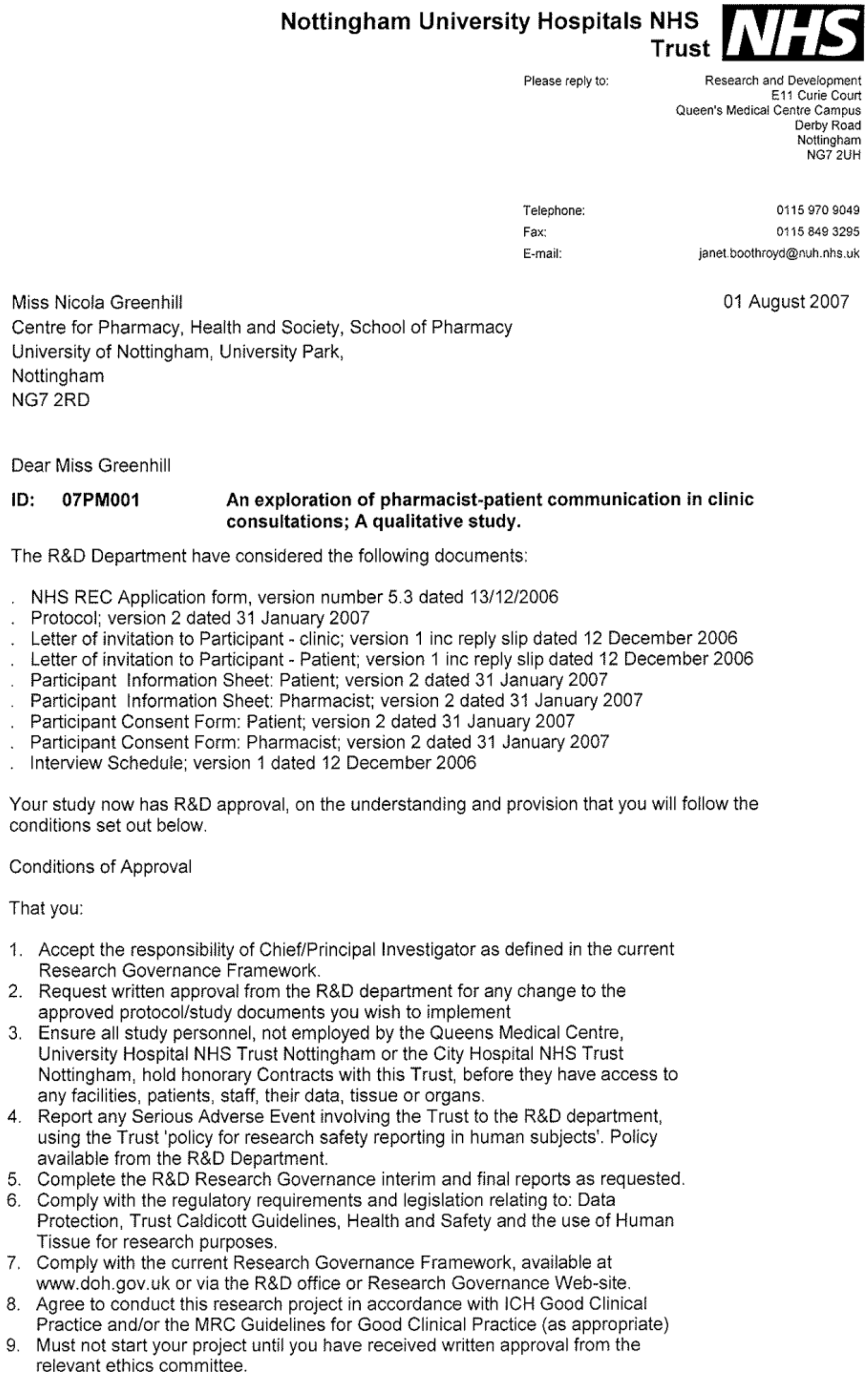


Methodology eg RCT, Qualitative interview study
Sample Group Description
Outcome Measures (Measurable End Points)
Start and End Dates
NHS R&D Programme (Yes/No)
Multicentre Research (Yes/No)
Project Related Web Site
Contact Person
Funding Organisation
Supplementary Information

Yours sincerely,

R Illingworth

Rachel Illingworth
Head of Research and Development
Copy to:
Relevant PCT Lead
Research Ethics Committee
Professor Claire Anderson, Educational Supervisor



Nottingham University Hospitals NHS Trust **NHS**

Please reply to:
Research and Development
E11 Curie Court
Queen's Medical Centre Campus
Derby Road
Nottingham
NG7 2UH

Telephone: 0115 970 9049
Fax: 0115 849 3295
E-mail: janet.boothroyd@nuh.nhs.uk

Miss Nicola Greenhill
Centre for Pharmacy, Health and Society, School of Pharmacy
University of Nottingham, University Park,
Nottingham
NG7 2RD

01 August 2007

Dear Miss Greenhill

ID: 07PM001 An exploration of pharmacist-patient communication in clinic consultations; A qualitative study.

The R&D Department have considered the following documents:

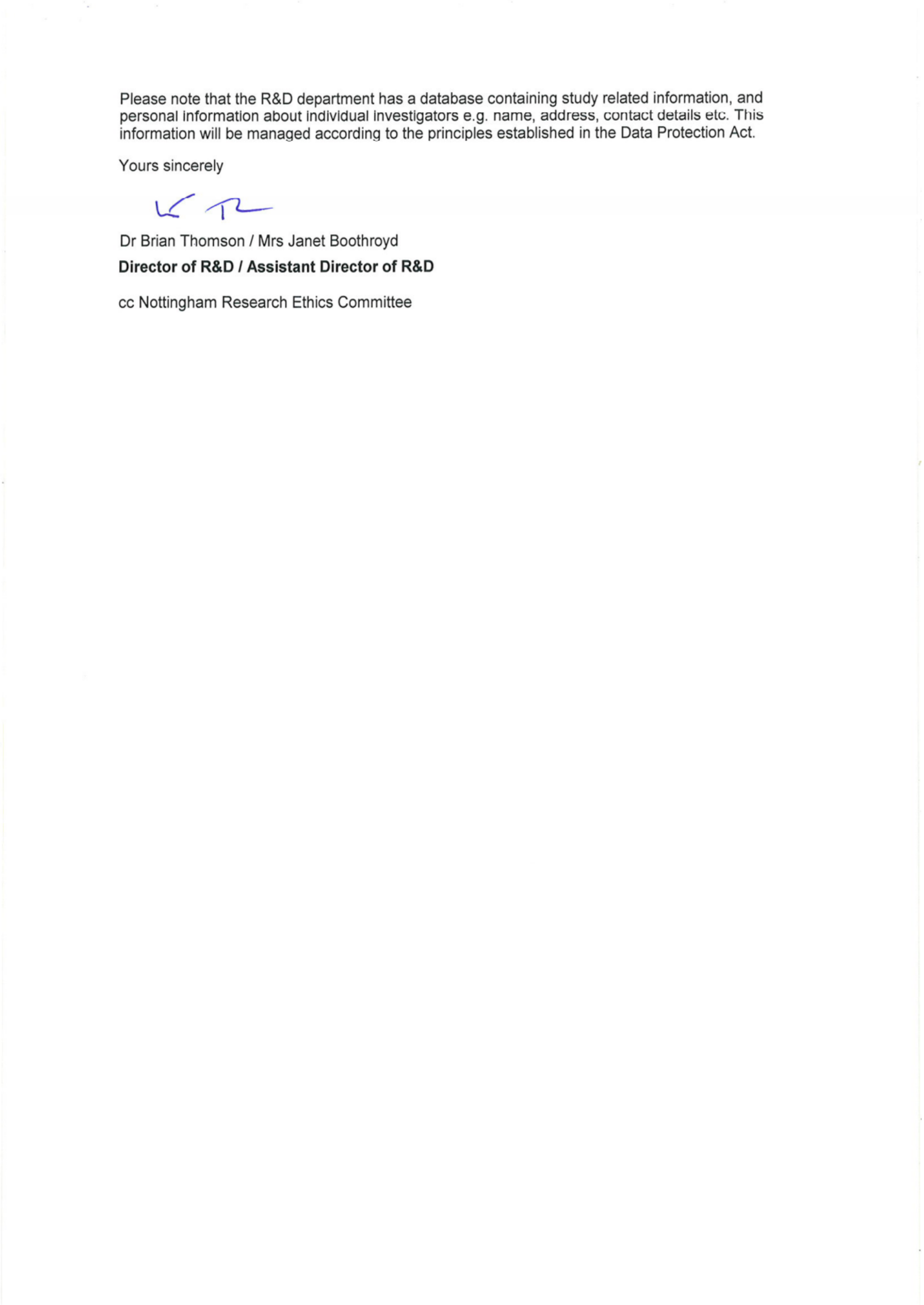
- NHS REC Application form, version number 5.3 dated 13/12/2006
- Protocol; version 2 dated 31 January 2007
- Letter of invitation to Participant - clinic; version 1 inc reply slip dated 12 December 2006
- Letter of invitation to Participant - Patient; version 1 inc reply slip dated 12 December 2006
- Participant Information Sheet: Patient; version 2 dated 31 January 2007
- Participant Information Sheet: Pharmacist; version 2 dated 31 January 2007
- Participant Consent Form: Patient; version 2 dated 31 January 2007
- Participant Consent Form: Pharmacist; version 2 dated 31 January 2007
- Interview Schedule; version 1 dated 12 December 2006

Your study now has R&D approval, on the understanding and provision that you will follow the conditions set out below.

Conditions of Approval

That you:

1. Accept the responsibility of Chief/Principal Investigator as defined in the current Research Governance Framework.
2. Request written approval from the R&D department for any change to the approved protocol/study documents you wish to implement
3. Ensure all study personnel, not employed by the Queens Medical Centre, University Hospital NHS Trust Nottingham or the City Hospital NHS Trust Nottingham, hold honorary Contracts with this Trust, before they have access to any facilities, patients, staff, their data, tissue or organs.
4. Report any Serious Adverse Event involving the Trust to the R&D department, using the Trust 'policy for research safety reporting in human subjects'. Policy available from the R&D Department.
5. Complete the R&D Research Governance interim and final reports as requested.
6. Comply with the regulatory requirements and legislation relating to: Data Protection, Trust Caldicott Guidelines, Health and Safety and the use of Human Tissue for research purposes.
7. Comply with the current Research Governance Framework, available at www.doh.gov.uk or via the R&D office or Research Governance Web-site.
8. Agree to conduct this research project in accordance with ICH Good Clinical Practice and/or the MRC Guidelines for Good Clinical Practice (as appropriate)
9. Must not start your project until you have received written approval from the relevant ethics committee.



Please note that the R&D department has a database containing study related information, and personal information about individual investigators e.g. name, address, contact details etc. This information will be managed according to the principles established in the Data Protection Act.

Yours sincerely

Dr Brian Thomson / Mrs Janet Boothroyd

Director of R&D / Assistant Director of R&D

cc Nottingham Research Ethics Committee

Appendix 3. Pharmacist Information Sheet and Consent Form

An exploration of pharmacist-patient communication in clinic consultations

Pharmacist Information Sheet

Part 1.

You are being invited to take part in a research study. Before you decide it is important for you to understand why the research is being done and what it will involve. Please take time to read the following information carefully. Talk to others about the study if you wish.

- Part 1 tells you the purpose of this study and what will happen to you if you take part.
- Part 2 gives you more detailed information about the conduct of the study.

Ask us if there is anything that is not clear or if you would like more information. Take time to decide whether or not you wish to take part.

What is the purpose of the study?

Good communication is extremely important in healthcare, and it is essential that healthcare professionals possess the skills required to make this possible. There has been much research into the ability of doctors to communicate with their patients and early studies showed that many doctors lacked the necessary skills. As a result communication skills training is now being given a greater emphasis in the medical school curriculum. There has however been little investigation into the communication skills of pharmacists, particularly in a consultation setting. Therefore this research aims to assess the current situation in pharmacist-patient consultations with regard to communication. This is an exploratory study which will hopefully guide further research and training to provide the highest quality of communication for patients.

Why have I been chosen?

Pharmacists that are involved in clinic-style consultations with patients have been chosen from both community and hospital pharmacy. You have been approached as you are involved in a patient clinic.

Do I have to take part?

No. It is up to you to decide whether or not to take part. If you do, you will be given this information sheet to keep and be asked to sign a consent form. You are still free to withdraw at any time and without giving a reason. Any data collected from you can be destroyed if you decide to withdraw from the trial.

What will happen to me if I take part?

1. You will be asked to help in recruiting patients by informing them of the study and providing them with an invitation letter and details form. You will be asked to forward any forms returned to you to the researcher in the envelopes provided.
2. An initial interview will be conducted concerning communication in general, particularly your opinion of communication training and the importance of good communication in practice. This interview will be audio-recorded and later transcribed for analysis. This will last approximately 30mins – 1hr
3. Observation and audio-recording of consultations with patients (5-10/pharmacist)
4. One concluding interview following completion of all patient consultations, to give you an opportunity to reflect on the process and highlight anything you feel is important. This interview will be audio-recorded and later transcribed for analysis.
   This will last approximately 30mins

- The researcher sitting in on the consultation will not affect the consultation in any way and the researcher will have no involvement in the consultation.
- Interviews can be arranged to take place at a time and location to suit you, including your home or a place local to you or at the University of Nottingham. All interviews will be conducted in a confidential venue.
- Audio taping of the consultation will allow the researcher to look at the communication in the consultation in more detail and direct quotations may be used in analysis however any direct quotations used will be fully anonymised prior to publication. All personally identifying information from any data collected will be removed before publication of any material.
- Data will be stored securely in the University of Nottingham during the study and in the secure School of Pharmacy archive room for 10 years after the study has ended. All data will then be destroyed. Any data stored electronically will be fully password protected.
- The researchers will NOT have access to patient medical records during the study.

Expenses and payments:

It is not expected that you will incur any additional costs due to this study therefore expenses will not be paid.

What do I have to do?

The only requirements of you are to help in recruiting patients and to take part in the 2 interviews and observed consultations.

What are the possible disadvantages and risks of taking part?

It is not anticipated that there will be any risks associated with the study. The interviews are unlikely to cover any sensitive issues and you will not be forced to answer any questions you feel uncomfortable with.

What are the possible benefits of taking part?

We cannot promise any direct benefit to you but the information we get might help to improve communication for future pharmacists and patients.

What if there is a problem?

Any complaint about the way you have been dealt with during the study or any possible harm you might suffer will be addressed. The detailed information on this is given in Part 2.

If you have a complaint, please contact the researcher, Nicola Greenhill on 0115 9515168

Will my taking part in the study be kept confidential?

Yes. All the information about your participation in this study will be kept confidential. The details are included in Part 2.

Contact Details:

Miss Nicola Greenhill MRPharmS
Division of Social Research in Medicines and Health,
School of Pharmacy,
University of Nottingham,
Nottingham
NG7 2RD
paxng1@nottingham.ac.uk
0115 9513417

This completes Part 1 of the Information Sheet.

If the information in Part 1 has interested you and you are considering participation, please continue to read the additional information in Part 2 before making any decision.

Part 2

What if there is a problem?

Complaints:

If you have a concern about any aspect of this study, you should ask to speak with the researchers who will do their best to answer your questions (0115 9513417).

Alternatively please contact the academic supervisors:
Prof. Claire Anderson – 0115 9515389
Prof. Tony Avery – 0115 8230209

Harm:

In the event that something does go wrong and you are harmed during the research study there are no special compensation arrangements. If you are harmed and this is due to someone's negligence then you may have grounds for a legal action for compensation against The University of Nottingham but you may have to pay your legal costs. The normal National Health Service complaints mechanisms will still be available to you.

Will my taking part in this study be kept confidential?

Yes, your confidentiality is being safeguarded during and after the study in the following ways. Procedures for handling, processing, storage and destruction of data are compliant with the Data Protection Act 1998.

- Data for interviews and consultations will be audiotaped and transcribed.
- In addition, observational notes will be made during the consultation.
- Data will be stored securely in the University of Nottingham during the study
- Each participant will be allocated an identification code. The list linking participant name and codes will only be available to the chief investigator. It will be stored in a locked drawer away from the data itself and destroyed at the end of the study.
- Data will be used for thematic analysis in the researcher's PhD.
- Data may be used for further detailed discourse or conversation analysis in a future study.
- Only authorised researchers will have access to view identifiable data
- Any data stored electronically will be fully password protected.
- Data will be stored in the secure School of Pharmacy archive room for 10 years after the study has ended. All data will then be destroyed.

All information which is collected about you during the course of the research will be kept strictly confidential.

Participants have the right to check the accuracy of data held about them and correct any errors.

What will happen to the results of the research study?

The results of this study will be used for analysis in the researcher's PhD thesis and for publication of papers in appropriate relevant scientific journals. A summary of the results will be available to research participants upon request. You will not be identified in any report/publication unless you have consented to release such information.

Who is organising and funding the research?

This research is being funded by the Centre for Social Research in Health and Healthcare at the University of Nottingham.

Who has reviewed the study?

This study was given a favourable ethical opinion for conduct in the NHS by the Derbyshire Research Ethics Committee.

Thank you for taking the time to read this information sheet.

Centre Number:
Study Number:
Pharmacist Identification Number for this study:

PHARMACIST CONSENT FORM

Title of Project:

An exploration of pharmacist-patient communication in clinic consultations

Name of Researcher: Nicola Greenhill

Please initial box

1. I confirm that I have read and understand the information sheet dated 09/07/2007 (version 3) for the above study. I have had the opportunity to consider the information, ask questions and have had these answered satisfactorily. ☐
2. I understand that my participation is voluntary and that I am free to withdraw at any time, without giving any reason, without my legal rights being affected. ☐
3. I understand that relevant data collected during the study, may be looked at by responsible individuals from The University of Nottingham, regulatory authorities or from the NHS Trust, where it is relevant to my taking part in this research. I give permission for these individuals to have access to this data. ☐
4. I give my consent for the audio-taping of both interviews and consultations and Observation of consultations as described in the information sheet. ☐
5. I give my consent for anonymised direct quotes to be used in reports and publications. ☐
6. I agree to take part in the above study. ☐

______________________	______________	______________
Name of Pharmacist	Date	Signature
______________________	______________	______________
Name of Person taking consent (if different from researcher)	Date	Signature
______________________	______________	______________
Researcher	Date	Signature

When completed, 1 for participant; 1 for researcher site file

Appendix 4. Patient Information Sheet and Consent Form

An exploration of pharmacist-patient communication in clinic consultations

Patient Information Sheet

Part 1.

You are being invited to take part in a research study. Before you decide it is important for you to understand why the research is being done and what it will involve. Please take time to read the following information carefully. Talk to others about the study if you wish.

- Part 1 tells you the purpose of this study and what will happen to you if you take part.
- Part 2 gives you more detailed information about the conduct of the study.

Ask us if there is anything that is not clear or if you would like more information. Take time to decide whether or not you wish to take part.

What is the purpose of the study?

Good communication is extremely important in healthcare, and it is essential that healthcare professionals possess the skills required to make this possible. There has been much research into the ability of doctors to communicate with their patients and early studies showed that many doctors lacked the necessary skills. As a result communication skills training is now being given a greater emphasis in the medical school curriculum. There has however been little investigation into the communication skills of pharmacists, particularly in a consultation setting. Therefore this research aims to assess the current situation in pharmacist-patient consultations with regard to communication. This is an exploratory study which will hopefully guide further research and training to provide the highest quality of communication for patients.

Why have I been chosen?

Patients have been chosen from a range of clinics in which a pharmacist runs a consultation with patients. Approximately 50 patients will be asked to take part in the study from a range of clinics.

Do I have to take part?

No. It is up to you to decide whether or not to take part. If you do, you will be given this information sheet to keep and be asked to sign a consent form. You are still free to withdraw at any time and without giving a reason. A decision to withdraw at any time, or a decision not to take part, will not affect the standard of care you receive. Any data collected from you can be destroyed if you decide to withdraw from the trial.

What will happen to me if I take part?

1. An initial interview prior to your meeting with the pharmacist
   This will last approximately 30mins – 1hr
2. This interview will cover your aims and expectations of the pharmacist and the consultation. This interview will be audio-recorded and later transcribed for analysis.
3. Observation and audio(tape)-recording of the consultation with the pharmacist
4. A concluding interview after the consultation.
   This will last approximately 30mins – 1hr
5. This interview will cover your feelings of how the consultation went and if your expectations were met. This interview will be audio-recorded and later transcribed for analysis.

- The researcher sitting in on the consultation with the pharmacist will not affect the consultation in any way and the researcher will have no involvement in the consultation.
- Interviews can be arranged to take place at a time and location to suit you, including your home or a place local to you, or at the University of Nottingham. All interviews will be conducted in a confidential venue.
- Audio taping of the consultation will allow the researcher to look at the communication in the consultation in more detail and direct quotations may be used in analysis however any direct quotations used will be fully anonymised prior to publication. All personally identifying information from any data collected will be removed before publication of any material.
- Data will be stored securely in the University of Nottingham during the study and in the secure School of Pharmacy archive room for 10 years after the study has ended. All data will then be destroyed. Any data stored electronically will be fully password protected.
- The researchers will NOT have access to patient medical records during the study.

Expenses and payments:

It is not expected that you will incur any additional costs due to this study however if you wish to be interviewed at the University of Nottingham or other location, any reasonable travel expenses will be reimbursed. Please retain all receipts/tickets.

What do I have to do?

The only requirements of you are to take part in the 2 interviews and observed consultation.

What are the possible disadvantages and risks of taking part?

It is not anticipated that there will be any risks associated with the study. The interviews are unlikely to cover any sensitive issues and you will not be forced to answer any questions you feel uncomfortable with.

What are the possible benefits of taking part?

We cannot promise the study will help you but the information we get might help to improve communication for future patients.

What happens when the research study stops?

The study will not affect your continued treatment in any way.

What if there is a problem?

Any complaint about the way you have been dealt with during the study or any possible harm you might suffer will be addressed. The detailed information on this is given in Part 2.

If you have a complaint, please contact the researcher, Nicola Greenhill on 0115 9515168

Will my taking part in the study be kept confidential?

Yes. All the information about your participation in this study will be kept confidential. The details are included in Part 2.

Contact Details:

Miss Nicola Greenhill MRPharmS
Division of Social Research in Medicines and Health,
School of Pharmacy
University of Nottingham,
Nottingham
NG7 2RD

paxng1@nottingham.ac.uk
0115 9513417

This completes Part 1 of the Information Sheet.

If the information in Part 1 has interested you and you are considering participation, please continue to read the additional information in Part 2 before making any decision.

Part 2

What if there is a problem?

Complaints:

If you have a concern about any aspect of this study, you should ask to speak with the researchers who will do their best to answer your questions (0115 9513417).

Alternatively please contact the academic supervisors:
Prof. Claire Anderson – 0115 9515389
Prof. Tony Avery – 0115 8230209

If your complaint is regarding your treatment, you should follow the standard NHS complaint procedure by contacting PALS (Patient Advice and Liaison Service) in your trust.

City Hospital PALS - 0800 052 1195.
QMC PALS - 0800 183 0204. or on 0115 924 9924 Ex 66623, 65412, 62301
or email PALS@nuh.nhs.uk
Nottingham City PCT PALS - Telephone: (0115) 9123320 Fax: (0115) 9123373
Email: pals@nottinghamcity-pct.nhs.uk Text: 07815 954352
Primary care services PALS - 0115 912 3336

Harm:

In the event that something does go wrong and you are harmed during the research study there are no special compensation arrangements. If you are harmed and this is due to someone's negligence then you may have grounds for a legal action for compensation against The University of Nottingham but you may have to pay your legal costs. The normal National Health Service complaints mechanisms will still be available to you.

Will my taking part in this study be kept confidential?

Yes, your confidentiality is being safeguarded during and after the study in the following ways. Procedures for handling, processing, storage and destruction of data are compliant with the Data Protection Act 1998.

- Data for interviews and consultations will be audiotaped and transcribed.
- In addition, observational notes will be made during the consultation.
- Data will be stored securely in the University of Nottingham during the study
- Each participant will be allocated an identification code. The list linking participant name and codes will only be available to the chief investigator. It will be stored in a locked drawer away from the data itself and destroyed at the end of the study.
- Data will be used for thematic analysis in the researcher's PhD.
- Data may be used for further detailed discourse or conversation analysis in a future study.
- Only authorised researchers will have access to view identifiable data
- Any data stored electronically will be fully password protected.
- Data will be stored in the secure School of Pharmacy archive room for 10 years after the study has ended. All data will then be destroyed.

All information which is collected about you during the course of the research will be kept strictly confidential.
Participants have the right to check the accuracy of data held about them and correct any errors.

What will happen to the results of the research study?

The results of this study will be used for analysis in the researcher's PhD thesis and for publication of papers in appropriate relevant scientific journals. A summary of the results will be available to research participants upon request. You will not be identified in any report/publication unless you have consented to release such information.

Who is organising and funding the research?

This research is being funded by the Centre for Social Research in Health and Healthcare at the University of Nottingham.

Who has reviewed the study?

This study was given a favourable ethical opinion for conduct in the NHS by the Derbyshire Research Ethics Committee.

Thank you for taking the time to read this information sheet.

Centre Number:
Study Number:
Patient Identification Number for this study:

PATIENT CONSENT FORM

Title of Project:

An exploration of pharmacist-patient communication in clinic consultations

Name of Researcher: Nicola Greenhill

Please initial box

1. I confirm that I have read and understand the information sheet dated 09/07/2007 (version 3) for the above study. I have had the opportunity to consider the information, ask questions and have had these answered satisfactorily. ☐

2. I understand that my participation is voluntary and that I am free to withdraw at any time, without giving any reason, without my medical care or legal rights being affected. ☐

3. I understand that relevant data collected during the study, may be looked at by responsible individuals from The University of Nottingham, regulatory authorities or from the NHS Trust, where it is relevant to my taking part in this research. I give permission for these individuals to have access to this data. ☐

4. I give my consent for the audio-taping of both interviews and consultations and Observation of consultations as described in the information sheet. ☐

5. I give my consent for anonymised direct quotes to be used in reports and publications. ☐

6. I agree to take part in the above study ☐

______________________	_______________	________________
Name of Patient	Date	Signature
______________________	_______________	________________
Name of Person taking consent (if different from researcher)	Date	Signature
______________________	_______________	________________
Researcher	Date	Signature

When completed, 1 for patient; 1 for researcher site file

Appendix 5. Letter of Invitation to the Study

An exploration of pharmacist-patient communication in clinic consultations

Dear Sir/Madam,

A researcher from the School of Pharmacy at the University of Nottingham is conducting a study into the communication skills of pharmacists. The study will look at the types and styles of communication used by pharmacists in a variety of environments by using interviews with both patients and pharmacists, and observing interactions with patients.

This clinic is involved in the study and is looking for patients who would be interested in taking part. The researcher will carry out two interviews with each patient, one before and one after their consultation with the pharmacist. Each interview would last between 30minutes and 1 hour and can be carried out at a place of your choosing, including your home if preferred. The consultation with the pharmacist would also be observed.

There is no obligation to take part in this study and your treatment will not be affected if you decide not to. If you are willing to take part in this study or would like more information, please complete the enclosed details form and either return it to your pharmacist or send by post to the researcher using the pre-paid envelope provided.

Thank you for your time.

The University of Nottingham

An exploration of pharmacist-patient communication in clinic consultations

I give my permission for the researcher to contact me using the details given below to arrange a time for an interview for the above study.

Signed ________________________Dated _______________

Print Name____________________________

Address ______________________________
____
____
____
____
Post Code ______________________________

Daytime telephone number _____________________

-Or - mobile number _____________________

Email address _____________________

Please return this form **to your pharmacist or post to the researcher** at the following address:
Nicola Greenhill
Division of Social Research in Medicines and Health,
School of Pharmacy,
University of Nottingham,
University Park,
Nottingham
NG7 2RD

Alternatively please contact the researcher to arrange a convenient time:
paxng1@nottingham.ac.uk
0115 9513417

Appendix 6. Follow-Up Letter to Pharmacists

The University of Nottingham

23 February 2009

Re: An Exploration of Pharmacist-Patient Communication in Clinic Consultations

Dear

I am now concluding the data collection phase of the above study which you have been involved in. As we have not been able to recruit patients to the study from your pharmacy/clinic it would be extremely helpful for me if you could complete the question below and return this form to me in the prepaid envelope provided. Please feel free add any additional comments you have about your involvement in the study should you wish to do so. All responses will be completely anonymised. Thank you for your help and involvement.

Kind regards,

Nicola Greenhill

I have not been able to recruit patients to the above study because: (please tick)

a) I have not had enough time
b) I have not been conducting appropriate consultations
c) Consultations have not been appointment based
d) Patients have not been interested in the study
e) I am no longer interested in the study
f) I have had other tasks which needed priority
g) I forgot about the study
h) It was difficult to recruit patients
i) other: (please state)

Any other comments:

Appendix 7. Interview Guides

Pharmacist Interview 1

1. Development of communication skills

- Formal education and learning
- Continual professional development (CPD)
- Life experiences
- Specific incidents
- On-the-job training
- Personality/Character

2. Importance of communication skills in practice

- Doctors/patients
- Face-to-face, telephone, email/letter
- Unknown or familiar patients
- Context – ward/clinic/in-patient/out-patient
- Context – Over the counter advice, MUR, Prescription counselling

3. Perceived patients' perspective

- What do you think patients expect
- How do you think patients see a pharmacist's role

Pharmacist Interview 2

1. Any information or comments you want to raise about the individual patients?

2. Reflection

   - How did you feel during the study?
   - How did you feel about me being there?
   - Did me being there alter your behaviour?
   - What have you learnt/taken from the study?

Patient Interview 1

1. The role of the pharmacist

- Patient expectations of the pharmacist
- Previous experiences with pharmacists
- Do you think your expectations have/will change?

2. Current relationship with clinic pharmacist

- How long have you known them?
- How well do you know them?
- How often do you see them?

3. Purpose of the appointment

- Similar appointments before?
- Prior information about the appointment
- What do you think is the purpose of the appointment?
- What do you expect to happen?
- What do you want to happen?
- What questions do you want to ask?

Patient Interview 2

1. How did it go?

- How did you feel in the appointment?
- How was the appointment similar to your expectations?
- What did you ask?
- Did you get satisfactory answers to all your questions?
- What, if anything, are you still unsure about?
- Anything else you would have liked to cover?

2. Communication

- How do you feel the pharmacist related to you?
  - Relaxed? Friendly?
- The pharmacist's communication
  - Language
  - Accent
  - Body language
  - Eye contact
  - Proximity etc
- Your communication
  - Did you feel relaxed?
  - Able to get your point across?
  - Able to say what you wanted to?

Appendix 8. Coding Framework for Thematic Analysis

Pharmacist Interview 1

- Awareness of CS
- Background and previous career
- Career
    - Business
- Communicating the profession
    - Expectations
    - Patient perception
        - Individual pharmacists
        - Pharmacy profession
    - Pharmacist perception
    - Professional image
- Differentiation in CS - types of CS
- Don't upset the doctor
- Importance of communication skills
    - Concordance
        - Information transfer
        - Patient communication
    - Not important
    - Patient benefit or understanding
    - Sheer importance
- Influences on communication
    - Difficulties in communication
    - Experience and confidence
    - External eg head office
    - Location and environment
    - Method eg telephone
    - Patients
    - Personality and background
    - Preparation
    - Resources
    - Responsibility + decision making
    - Time
- Inter-professional communication
- Learning communication skills

    - Enough training?
    - Formal teaching
        - Post-qualification
        - Pre-reg
        - University
    - Future or additional training
    - Methods
    - On the job learning – experiential
    - Opinions
    - Other sources of learning
    - Specific skills
    - Competence in CS
    - Utilising CS training
- New roles
- Patient expectations
- Reflection on own CS
- Tailoring Vs guides + planning
- Trust and relationships and empathy
- Utilising comm skills
- Unrelated comments

Patient Interview 1

- Background - patient's story
- Beliefs about medicines
- Chain Vs Independent
- Changing opinions
- Changing or extra services
- Confusion over HCP roles
- Difficulties with seeing pharmacist
- Examples
- Expectations and opinions of a pharmacist
- Expectations of communication
- Feeling responsible or loyalty
- General public opinions
- Influence of GP

- Influences on perception
- Inter-professional issues
- Issues with the researcher
- Knowledge and expectation about appointment
- Knowledge of pharmacist
- Location and environment
- Patient communication
- Pharmacy staff
- Praise or criticism of pharmacist
- Prepared questions or concerns
- Problems or general issues
- Red tape
- Relationships and trust
    - Importance of relationship
    - Know your medical history
    - Knowledge of family
    - Relationship not important
    - Trust
- Time
- What makes a pharmacist good
- Would like to see

Patient Interview 2

- Ulterior motives
- Asking questions
- Awareness of communication
- Business influences
- Change or improve consultation
- Clarity of information from Pharm
- Confusion and difficulties – problems
- Describe the pharmacist – attributes
- First impressions and appearance
- Future possible issues, future contact
- General pharmacy and healthcare - good service
- General thoughts about consultation

- Issues with researcher
- Location and environment
- Patient communication and involvement
- Patient health and meds opinions
- Patient prior knowledge and expectations
- Pharmacist communication – general
    - Body language and proximity
    - Computer or other aids etc
    - Eye contact
    - Flow
    - Language
    - Manner
    - Tailoring
    - Tone – atmosphere
    - Topics
    - Voice
- Pharmacist interested -support
- Pharmacist knowledge and competence...
- Pharmacy communication generally
- Pharmacy or hospital staff
- Praise
- Purpose
- Unrelated
- Relationship
- Specific events – awkwardness
- Time
- Trust
- Useful consultation - change actions
- Worries and reassurance

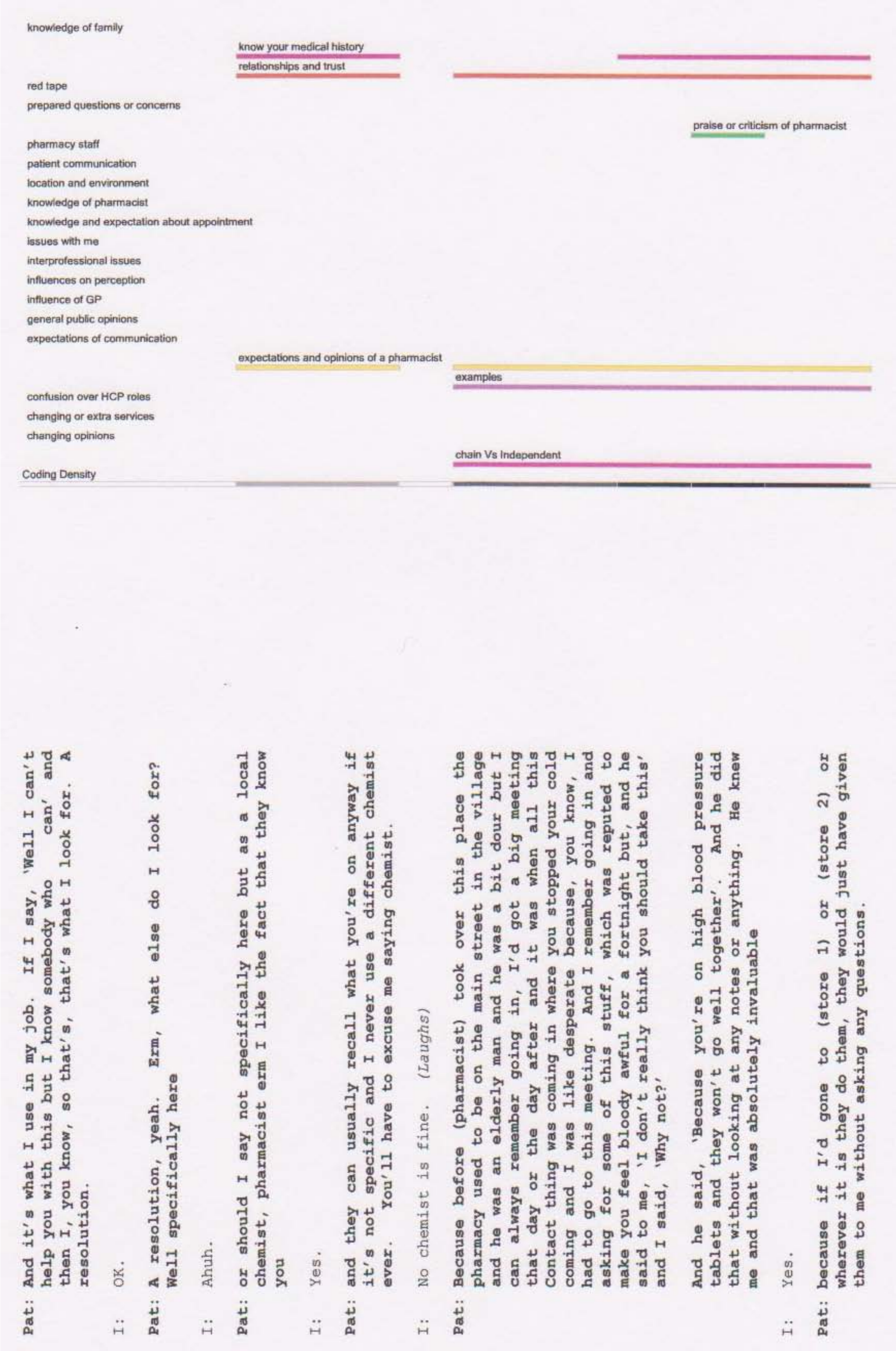
Consultations

- Social interaction
    - Family
    - Holidays
    - Sport
    - Travel – to appointment
    - Lengthy medical history/high number of tablets
    - Jokes
    - Asides
- Computer related
- Dealing with structure
- Consultation task related

NB The coding framework for the consultation transcripts is shorter as this study was not exploring the clinical content of the pharmacist-patient consultations. Clinical/pharmaceutical content was coded according to the Calgary – Cambridge Guide.

Appendix 9. Example of Coded Transcript

The following pages are extracted from patient 18, interview 1. The coloured bars indicate which codes have been assigned to the text at the corresponding height on the page (landscape).


knowledge of family
know your medical history
relationships and trust
red tape
prepared questions or concerns
praise or criticism of pharmacist
pharmacy staff
patient communication
location and environment
knowledge of pharmacist
knowledge and expectation about appointment
issues with me
interprofessional issues
influences on perception
influence of GP
general public opinions
expectations of communication
expectations and opinions of a pharmacist
examples
confusion over HCP roles
changing or extra services
changing opinions
chain Vs Independent
Coding Density

Pat: And it's what I use in my job. If I say, 'Well I can't help you with this but I know somebody who can' and then I, you know, so that's, that's what I look for. A resolution.

I: OK.

Pat: A resolution, yeah. Erm, what else do I look for? Well specifically here

I: Ahuh.

Pat: or should I say not specifically here but as a local chemist, pharmacist erm I like the fact that they know you

I: Yes.

Pat: and they can usually recall what you're on anyway if it's not specific and I never use a different chemist ever. You'll have to excuse me saying chemist.

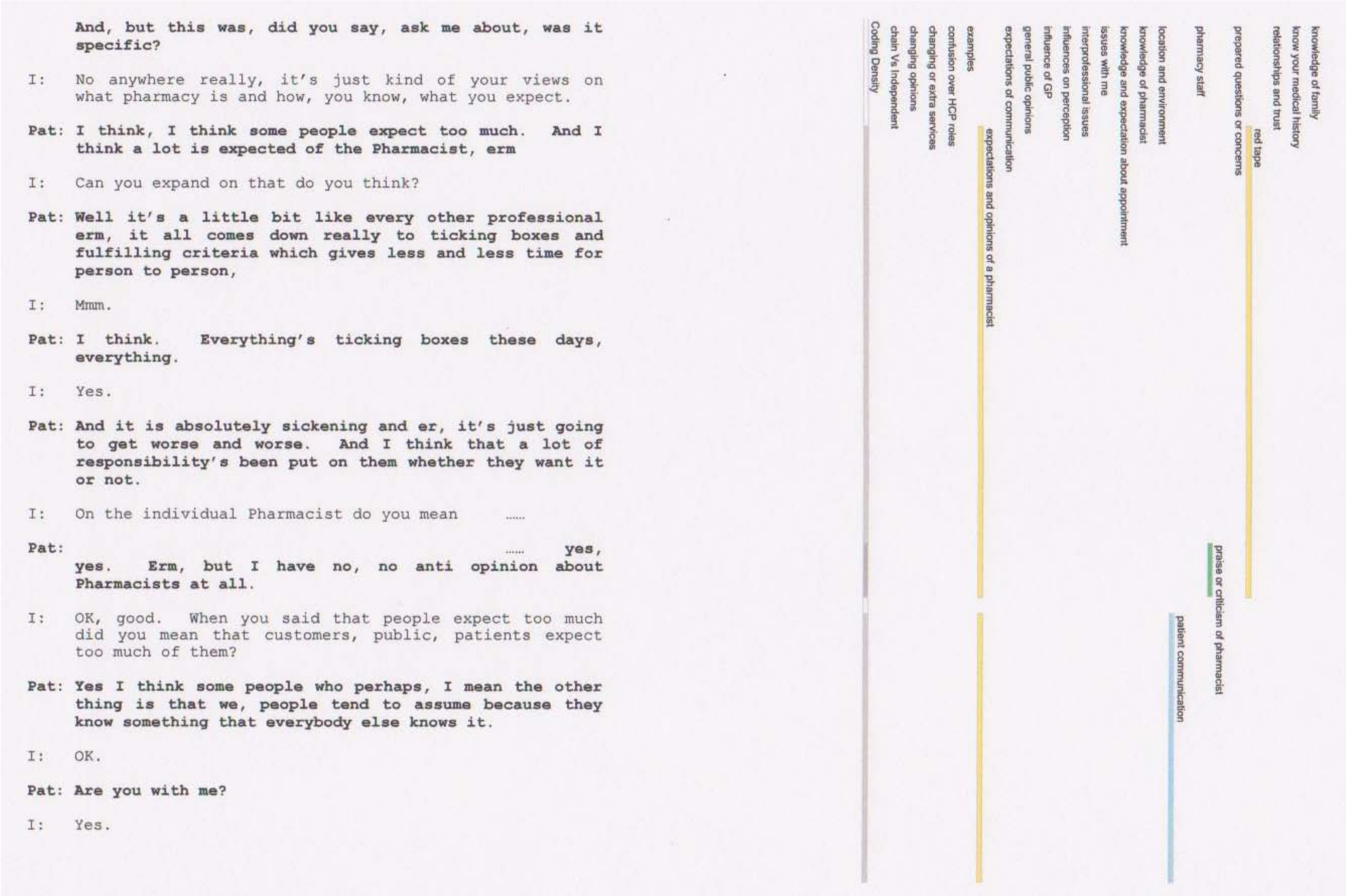
I: No chemist is fine. *(Laughs)*

Pat: Because before (pharmacist) took over this place the pharmacy used to be on the main street in the village and he was an elderly man and he was a bit dour *but* I can always remember going in, I'd got a big meeting that day or the day after and it was when all this Contact thing was coming in where you stopped your cold coming and I was like desperate because, you know, I had to go to this meeting. And I remember going in and asking for some of this stuff, which was reputed to make you feel bloody awful for a fortnight but, and he said to me, 'I don't really think you should take this' and I said, 'Why not?'

And he said, 'Because you're on high blood pressure tablets and they won't go well together'. And he did that without looking at any notes or anything. He knew me and that was absolutely invaluable

I: Yes.

Pat: because if I'd gone to (store 1) or (store 2) or wherever it is they do them, they would just have given them to me without asking any questions.



And, but this was, did you say, ask me about, was it specific?

I: No anywhere really, it's just kind of your views on what pharmacy is and how, you know, what you expect.

Pat: **I think, I think some people expect too much. And I think a lot is expected of the Pharmacist, erm**

I: Can you expand on that do you think?

Pat: **Well it's a little bit like every other professional erm, it all comes down really to ticking boxes and fulfilling criteria which gives less and less time for person to person,**

I: Mmm.

Pat: **I think. Everything's ticking boxes these days, everything.**

I: Yes.

Pat: **And it is absolutely sickening and er, it's just going to get worse and worse. And I think that a lot of responsibility's been put on them whether they want it or not.**

I: On the individual Pharmacist do you mean ……

Pat: …… **yes, yes. Erm, but I have no, no anti opinion about Pharmacists at all.**

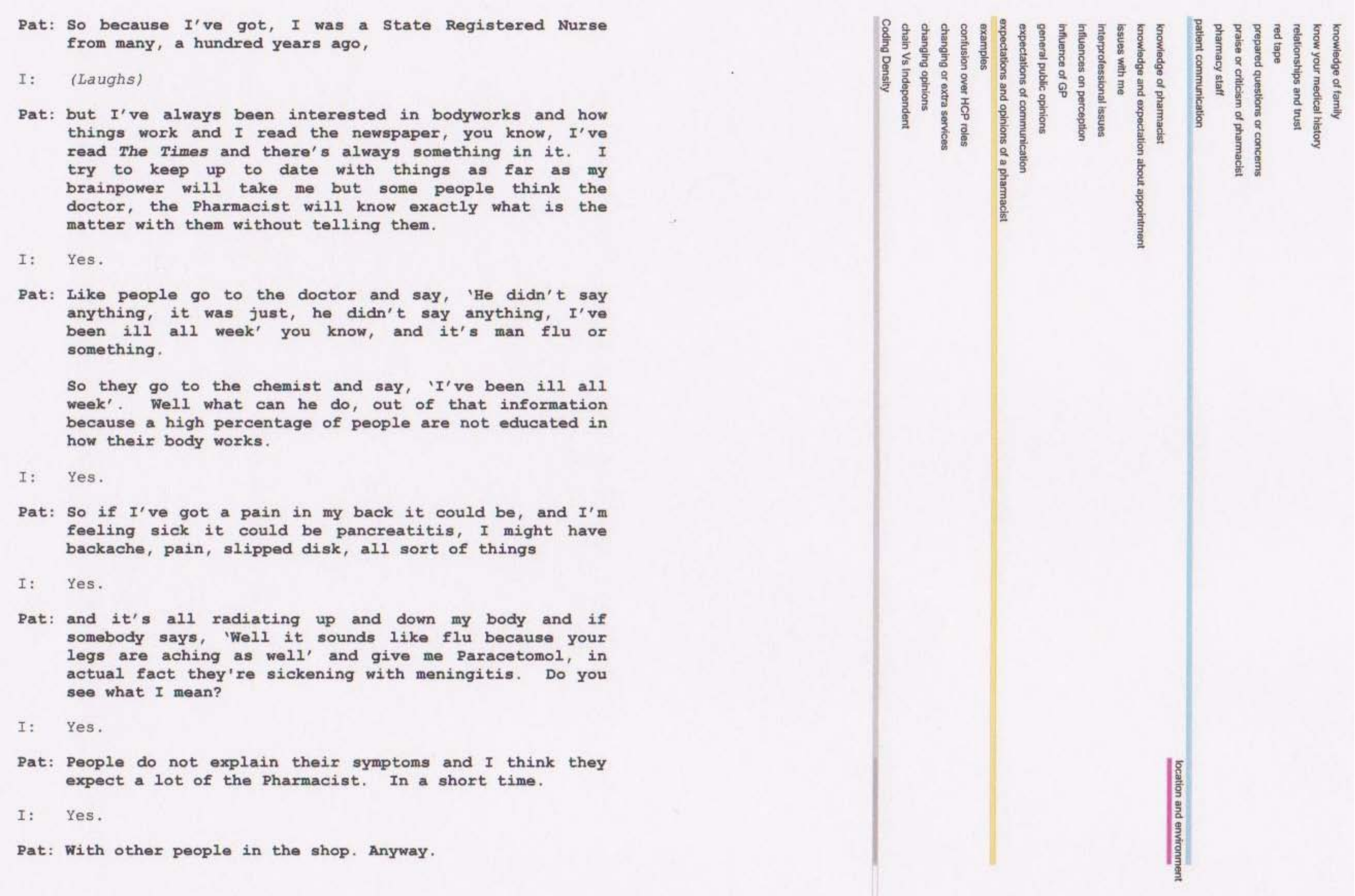
I: OK, good. When you said that people expect too much did you mean that customers, public, patients expect too much of them?

Pat: **Yes I think some people who perhaps, I mean the other thing is that we, people tend to assume because they know something that everybody else knows it.**

I: OK.

Pat: **Are you with me?**

I: Yes.



Pat: So because I've got, I was a State Registered Nurse from many, a hundred years ago,

I: *(Laughs)*

Pat: but I've always been interested in bodyworks and how things work and I read the newspaper, you know, I've read *The Times* and there's always something in it. I try to keep up to date with things as far as my brainpower will take me but some people think the doctor, the Pharmacist will know exactly what is the matter with them without telling them.

I: Yes.

Pat: Like people go to the doctor and say, 'He didn't say anything, it was just, he didn't say anything, I've been ill all week' you know, and it's man flu or something.

So they go to the chemist and say, 'I've been ill all week'. Well what can he do, out of that information because a high percentage of people are not educated in how their body works.

I: Yes.

Pat: So if I've got a pain in my back it could be, and I'm feeling sick it could be pancreatitis, I might have backache, pain, slipped disk, all sort of things

I: Yes.

Pat: and it's all radiating up and down my body and if somebody says, 'Well it sounds like flu because your legs are aching as well' and give me Paracetomol, in actual fact they're sickening with meningitis. Do you see what I mean?

I: Yes.

Pat: People do not explain their symptoms and I think they expect a lot of the Pharmacist. In a short time.

I: Yes.

Pat: With other people in the shop. Anyway.

Appendix 10. Calgary-Cambridge Guide

Reproduced with kind permission from the author, Jonathan Silverman (Silverman, Kurtz et al. 2005)

I. Initiating the session

A. Establishing initial rapport

1. **Greets** patient and obtains patient's name
2. **Introduces** self, role and nature of interview; obtains consent if necessary
3. **Demonstrates respect** and interest, attends to patient's physical comfort

B. Identifying the reason(s) for the consultation

4. **Identifies** the patient's problems or the issues that the patient wishes to address with appropriate **opening question** (e.g. "What problems brought you to the hospital?" or "What would you like to discuss today?")
5. **Listens** attentively to the patient's opening statement, without interrupting or directing patient's response
6. **Confirms list and screens** for further problems (e.g. "so that's headaches and tiredness; anything else……?")
7. **Negotiates agenda** taking both patient's and physician's needs into account

II. Gathering Information

A. Exploration of patient's problems

8. **Encourages patient to tell the story** of the problem(s) from when first started to the present in own words (clarifying reason for presenting now)
9. **Uses open and closed questioning technique**, appropriately moving from open to closed
10. **Listens** attentively, allowing patient to complete statements without interruption and leaving space for patient to think before answering or go on after pausing
11. **Facilitates** patient's responses verbally and non–verbally e.g. use of encouragement, silence, repetition, paraphrasing, interpretation
12. **Picks up** verbal and non–verbal **cues** (body language, speech, facial expression, affect); **checks out and acknowledges** as appropriate
13. **Clarifies** patient's statements that are unclear or need amplification (e.g. "Could you explain what you mean by light headed")
14. **Periodically summarises** to verify own understanding of what the patient has said; invites patient to correct interpretation or provide further information.
15. **Uses** concise, **easily understood questions and comments**, avoids or adequately explains jargon
16. **Establishes dates and sequence** of events

B. Additional skills for understanding the patient's perspective

17. Actively **determines and appropriately explores**:

- patient's **ideas** (i.e. beliefs re cause)
- patient's **concerns** (i.e. worries) regarding each problem
- patient's **expectations** (i.e., goals, what help the patient had expected for each problem)
- effects: how each problem **affects** the patient's life

18. **Encourages patient to express feelings**

III. Providing structure to the consultation

A. Making organisation overt19. **Summarises** at the end of a specific line of inquiry to confirm understanding before moving on to the next section

20. Progresses from one section to another using **signposting**; includes rationale for next section

B. Attending to flow

21. Structures interview in **logical sequence**

22. Attends to **timing** and keeping interview on task

IV. Building relationship

A. Using appropriate non-verbal behaviour

23. **Demonstrates appropriate non–verbal behaviour**

- eye contact, facial expression
- posture, position & movement
- vocal cues e.g. rate, volume, tone

24. If reads, writes **notes** or uses computer, does **in a manner that does not interfere with dialogue or rapport**

25. **Demonstrates** appropriate **confidence**

B. Developing rapport

26. **Accepts** legitimacy of patient's views and feelings; is not judgmental

27. **Uses empathy** to communicate understanding and appreciation of the patient's feelings or predicament; overtly **acknowledges patient's views** and feelings

28. **Provides support**: expresses concern, understanding, willingness to help; acknowledges coping efforts and appropriate self care; offers partnership

29. **Deals sensitively** with embarrassing and disturbing topics and physical pain, including when associated with physical examination

C. Involving the patient

30. **Shares thinking** with patient to encourage patient's involvement (e.g. "What I'm thinking now is....")

31. **Explains rationale** for questions or parts of physical examination that could appear to be non-sequiturs

32. During **physical examination**, explains process, asks permission

V. Explanation and Planning

A. Providing the correct amount and type of information

Aims: to give comprehensive and appropriate information
to assess each individual patient's information needs
to neither restrict or overload

33. **Chunks and checks:** gives information in manageable chunks, checks for understanding, uses patient's response as a guide to how to proceed

34. **Assesses patient's starting point:** asks for patient's prior knowledge early on when giving information, discovers extent of patient's wish for information

35. **Asks patients what other information would be helpful** e.g. aetiology, prognosis

36. **Gives explanation at appropriate times:** avoids giving advice, information or reassurance prematurely

B. Aiding accurate recall and understanding

Aims: to make information easier for the patient to remember and understand

37. **Organises explanation:** divides into discrete sections, develops a logical sequence

38. **Uses explicit categorisation or signposting** (e.g. "There are three important things that I would like to discuss. 1st..." "Now, shall we move on to.")

39. **Uses repetition and summarising** to reinforce information

40. **Uses** concise, **easily understood language**, avoids or explains jargon

41. **Uses visual methods of conveying information:** diagrams, models, written information and instructions

42. **Checks patient's understanding** of information given (or plans made): e.g. by asking patient to restate in own words; clarifies as necessary

C. Achieving a shared understanding: incorporating the patient’s perspective

Aims: to provide explanations and plans that relate to the patient’s perspective
to discover the patient’s thoughts and feelings about information given
to encourage an interaction rather than one-way transmission

43. **Relates explanations to patient’s perspective:** to previously elicited ideas, concerns and expectations

44. **Provides opportunities and encourages patient to contribute:** to ask questions, seek clarification or express doubts; responds appropriately

45. **Picks up and responds to verbal and non-verbal cues** e.g. patient’s need to contribute information or ask questions, information overload, distress

46. **Elicits patient's beliefs, reactions and feelings** re information given, terms used; acknowledges and addresses where necessary

D. Planning: shared decision making

Aims: to allow patients to understand the decision making process
to involve patients in decision making to the level they wish
to increase patients’ commitment to plans made

47. **Shares own thinking as appropriate:** ideas, thought processes, dilemmas

48. **Involves patient:**
- offers suggestions and choices rather than directives
- encourages patient to contribute their own ideas, suggestions

49. **Explores management options**

50. **Ascertains level of involvement patient wishes** in making the decision at hand

51. **Negotiates a mutually acceptable plan**
- signposts own position of equipoise or preference regarding available options
- determines patient’s preferences

52. **Checks with patient**
- if accepts plans,
- if concerns have been addressed

VI. Closing the session

A. Forward planning

53. **Contracts** with patient re next steps for patient and physician

54. **Safety nets**, explaining possible unexpected outcomes, what to do if plan is not working, when and how to seek help

B. Ensuring appropriate point of closure55. **Summarises session** briefly and clarifies plan of care

56. **Final check** that patient agrees and is comfortable with plan and asks if any corrections, questions or other issues

VII. Options in explanation and planning – includes extra detail on content and process skills related to specific tasks with the explanation and planning section.

A. If discussing opinion and significance of problem

57. Offers opinion of what is going on and names if possible
58. Reveals rationale for opinion
59. Explains causation, seriousness, expected outcome, short- and long-term consequences
60. Elicits patient's beliefs, reactions, concerns re opinion

B. If negotiating mutual plan of action

61. Discusses options e.g. no action, investigation, medication or surgery, non-drug treatments (physiotherapy, walking aids, fluids, counselling), preventive measures
62. Provides information on action or treatment offered, name steps involved, how it works, benefits and advantages, possible side-effects
63. Obtains patient;s view of need for action, perceieved benefits, barriers, motivation
64. Accepts patient's views; advocates alternative viewpoint as necessary
65. Elicits patient's reactions and concerns about plans and treatments, including acceptability
66. Takes patient's lifestyle, beliefs, cultural background and abilities unto consideration
67. Encourages patient to be involved in implementing plans, to take responsibility and be self-reliant
68. Asks about patient support systems; discusses other support available

C. If discussing investigations and procedures

69. Provides clear information on procedures e.g. what patient might experience, how patient will be informed of results
70. Relates procedures to treatment plan: value, purpose
71. Encourages questions about and discussion of potential anxieties or negative outcomes.

Silverman, J., S. Kurtz, et al. (2005). Skills for Communicating with Patients. Abingdon, Radcliffe Publishing Ltd.

Appendix 11. Publications and Presentations from this Study

Abstracts Published

- Greenhill N, Anderson C, Avery T, Pilnick A. **Influence of relationships, trust and rapport on pharmacist-patient communication.** International Journal of Pharmacy Practice 2010; 18(suppl 2):25
- Greenhill N, Anderson C, Avery T, Pilnick A. **Analysis of pharmacist-patient communication during appointment-based consultations using the Calgary-Cambridge Guide to Consultations.** Pharmacy Practice 2010 8(suppl. 1) p53
- Greenhill N, Anderson C, Avery T, Pilnick A. **The influence of structure on pharmacist-patient communication during appointment-based consultations.** Pharmacy Practice 2010 8(suppl. 1) p94
- Greenhill N, Anderson C, Avery T, Pilnick A. **An exploration of pharmacist-patient communication in clinic consultations: a qualitative study**. International Journal of Pharmacy Practice 2008; 16(suppl 2):B33

Presentations

Oral Presentations:

- **Influence of relationships, trust and rapport on pharmacist-patient communication.** Royal Pharmaceutical Society Conference 2010. London, United Kingdom
- **Analysis of pharmacist-patient communication during appointment-based consultations using the Calgary-Cambridge Guide to Consultations.** International Social Pharmacy Workshop 2010. Lisbon, Portugal
- **An exploration of pharmacist-patient communication in clinic consultations: a qualitative study**. International Social Pharmacy Workshop 2008. Queenstown, New Zealand
- **Pharmacist-Patient Communication – Methods and Results.** Division of Social Research in Medicines and Health Research Group Presentation. The University of Nottingham June 2008
- **Pharmacist – Patient Communication – Theory, Relevance and Results.** School of Pharmacy Post-graduate seminar series, The University of Nottingham 2008
- **Qualitative research and pharmacist – patient communication**, Medway School of Pharmacy, October 2007

Poster presentations:

- **The influence of structure on pharmacist-patient communication during appointment-based consultations.** International Social Pharmacy Workshop 2010. Lisbon, Portugal
- **Pharmacist-Patient Communication: A Qualitative Study.** The University of Nottingham School of Pharmacy Research Day. 2008