AN EVALUATION OF PROFESSIONALISM OF RETAIL COMMUNITY PHARMACISTS AND QUALITY OF SERVICES PROVIDED TO CUSTOMERS

by

MAYA KANDHAI

A Dissertation presented to
The Graduate School of Business
University of Natal, Durban

In partial fulfillment of the requirements for the degree of
Master of Business Administration
University of Natal, Durban

June 2002

ACKNOWLEDGEMENTS

I wish to thank the staff of the Graduate School of Business at the University of Natal (Durban) for their help and encouragement.

In particular, I wish to thank Professor E Thomson for acting as a supervisor, and for her guidance advice on the structure and content of this dissertation.

I also wish to thank my family and friends for all the support and encouragement that they provided.

TABLE OF CONTENTS

LIST OF TABLES AND FIGURES

Tables **PAGE**

Figures **PAGE**

ABSTRACT

Professionalism and service excellence have been gaining recognition as important aspects of the latest strategic theories in the retail community sector of pharmacy. Providing high quality services to customers and enhanced professionalism can result in higher levels of health care and added benefits to the customer as well as raised industry standards.

The main aim of the study was to carry out an evaluation of professionalism amongst retail community pharmacists and quality of services provided to customers in an attempt to more fully understand issues that can contribute to higher functioning practice in community pharmacies.

Two surveys were employed:

- Pharmacist survey to evaluate professionalism
- Customer survey to establish quality of services provided to them in retail pharmacies

The evaluation was based on 25 questionnaires for the pharmacist survey and 75 for the customer survey.

Most pharmacists are actively involved in those aspects related to enhancing professionalism. Pharmacists are becoming increasingly aware of the broader scope of the practice of the profession. Of the 25 pharmacists, 84% were involved in continuing professional development (CPD) at some stage. Most pharmacists were actively involved in the provision of pharmaceutical care and all pharmacists indicated compliance with Good Pharmacy Practice (GPP) standards. However, more emphasis was needed with regards to involvement in community related issues, promotions and activities, in-house staff training and the provision of additional services.

Most customers had favourable service encounters with the pharmacist and employees and their overall satisfaction with the general evidence of service

indicated that customers were pleased with the overall quality of services provided in retail community pharmacies. Factors that demanded more attention included : staff training, patient education, waiting times and the provision of counselling areas.

Overall, data obtained from this study indicate moderate to high levels of professionalism amongst retail community pharmacists and good to excellent rating of quality of services by customers.

CHAPTER 1
INTRODUCTION

1.1 INTRODUCTION

Pharmacy and pharmacists of South Africa have committed themselves to delivering excellent pharmaceutical services to the country (The South African Pharmacy Council, Annual Report 1999). Community pharmacists in South Africa and other countries as well are facing constant pressures and changes influenced by many factors out of their sphere of control: A demanding, challenging and dynamic environment (De Nicola, 1997). Proposed legislation, existing threats from chain stores, mail order businesses, the advent of the Internet as well as other technological changes have all contributed to this. In view of this, the provision of quality services is a clear professional challenge, which is taking shape as the new way of understanding the profession, for the years ahead. This challenge lies in moving away from product-orientated activities to patient-orientated services which forms an integral part of the emerging managed care ethos.

As competition in the retail sector intensifies, pharmacies are using a variety of strategies to hold on to their market share. Pharmacists have responded with a variety of strategies, some calculated, some intuitive, but the most successful ones have realized that the battle can only be won through differentiation. Amongst the prescriptions for change and long-term survival, is the need for use of the latest strategic theories, i.e. professionalism and service excellence (Bhoola and Makin, 2001). In addition to various other factors, professional training and ability are the true pillars of quality service delivery.

1.2 BACKGROUND OF THE STUDY

Previous studies have suggested that retail pharmacists must, in response to the changing business environment, deliver higher levels of service differentiation coupled with service excellence and professionalism (Bhoola and Makin, 2001). Recent trends in pharmacy have focused on professionalism and

service excellence and the change from 'product-oriented' to 'patient-oriented' care. A distinct practice shift, from the theoretical, is already progressing and occurring to varying degrees in retail community settings.

Pharmacists have an important role to play in the communities where they operate, especially in terms of delivering quality service to customers and adding value to the community at large. The role of the pharmacist as a care-giver, patient educator and expert in drug therapy has always been in existence. The seemingly dramatic changes taking place in the pharmacy profession are in many ways an expansion of the pharmacists' existing professional responsibilities (*Front Shop*, 2001). These changes should therefore be viewed as opportunities of developing and enhancing existing strengths and gaining recognition for these competencies.

A study conducted by Futter and Burton (1998) to find out the attitudes of community pharmacists towards performance standards, whether they applied them and if they were suitably equipped to do so. The pharmacists taking part in this survey thought that the performance standards were fairly important, moderately practical and felt that they applied the standards to three out of every five patients (*Modern Pharmacy*, September 1999).

A recent street survey revealed strong consumer sentiment for pharmacies to return to what they used to be '...in the old days' (Roux, 2001). Respondents revealed that the pharmacy used to be a place where people knew their customers by name, greeted them like long-lost friends, a place where they felt welcome and at ease just to look around. It is of great concern then, if these respondents were suggesting that these qualities are no longer to be found in pharmacies today.

Truter (2001) writes: "Consumers are becoming increasingly sensitive about quality. Quality of services has become an important competitive weapon for many businesses and offers many advantages such as increased profits, improved productivity, a large market share and lower costs." Truter (2001) further advocates, "Maybe the time has come to focus more on quality and how

the services that you provide can meet the demands and requirements of the marketplace better." This raises the following issues:

- Are pharmacists doing the right things, are they equipped to provide efficient services, how are pharmacies doing?

- Are customers delighted and getting exactly the services they need, precisely when and how they need them?

1.3 OBJECTIVES OF THE STUDY

The main aim of the study was to carry out an evaluation of professionalism of retail community pharmacists and quality of services provided to customers. This study was carried out in an attempt to more fully understand issues that can contribute to higher functioning practice in community pharmacies. The objectives of this study were as follows:

- To evaluate the levels of **professionalism** of community pharmacists in terms of the elements presented in the theoretical model.

- To investigate how customers perceive the **quality of services** provided to them.

- To observe overall trends in retail community pharmacies. How close does the reality of practice come to the theory (which has been well covered and documented)?

- To then evaluate the significance of these results in an attempt to develop the quality of the professional competence of the pharmacy, thus raising industry standards as well as the level of health care provided.

Such information revealed by the study will make professional education of pharmacists more responsive to the demands of a changing South African society.

1.4 PROBLEM STATEMENT

Recent studies show the South African community or retail pharmacy industry to be an industry under threat. At the same time, there are tremendous opportunities facing retail pharmacy. Retail pharmacists can strategically position themselves in response to the changing business environment.

Part of this strategic positioning involves professionalism and the provision of high quality services. In this study, these two concepts were evaluated to determine the following:

Are South African community pharmacies 'good enough' and what is 'good enough'? How do pharmacists rate in terms of professionalism and how do customers perceive the quality of services provided to them? Are community pharmacists 'getting it right'? A theoretical model is presented below.

A Theoretical Model

PROFESSIONALISM

- Professional knowledge and continuing education
- Compliance with Good Pharmacy Practice Standards
- The Provision of Pharmaceutical Care
- Supply of Additional Services and Community Involvement
- Expanding the role of Pharmacy staff
- Pharmacists' relationship with other Health Care professionals
- Ethical Behaviour and Code of Conduct

QUALITY OF SERVICES PROVIDED TO CUSTOMERS

- Tangibles
- Reliability
- Responsiveness
- Assurance
- Empathy

(Berry *et al;1990)*

1.5 RESEARCH METHODOLOGY

A brief description of the methodology is given here with details included in an Appendix. The main empirical research is discussed in this section.

1.5.1 Research Design, Sampling Design, Data Collection and Analysis

An exploratory research design using qualitative techniques (case study) was employed. The study was cross-sectional and the method of data collection was communicated-based in the form of self-administered surveys (questionnaires).

Two surveys were employed:

- Pharmacist survey to evaluate professionalism
- Customer survey to establish perceptions of quality of services provided to them in retail community pharmacies.

For both surveys the 'drop-off' delivery system was used where questionnaires were personally delivered to target respondents. The use of this method provided advantages in that it enabled the researcher to:

- Encourage the respondent to complete the questionnaire
- Stress the importance of his/her participation and ease of completion
- Explain/clarify anything that was unclear to the respondent
- Assure complete confidentiality
- Indicate the procedure for returning it.

Although this was likely to increase response rates and reduce the non response error, follow-up requests were made by telephone calls and personal visits. For the pharmacist survey, the method was especially useful in that additional information could be gathered by observational studies. The questionnaires were collected after three weeks giving the respondents sufficient time to complete them at ease.

Since the study was exploratory in nature, a convenience sample was employed for both surveys. Although this design is least reliable, it was appropriate since the study involved an evaluation and observation of overall trends and was still in the early stages of exploratory research.

The sample of pharmacists consisted of retail community pharmacists who are registered with the South African Pharmacy Council and practising full-time. The sample of customers included both males and females between the ages of 18 and over 56, who were currently using or had used services in retail community pharmacies in the past 12 months.

A total of 40 questionnaires were distributed to pharmacists and 100 were distributed to customers. From the pharmacist survey, 25 questionnaires were returned which yielded a 62.5% response rate. Since this percentage is more than a third of the sample, it is regarded as a high response rate. From the customer survey 75 questionnaires were returned which yielded a 75% response rate (also a high response rate). None of the questionnaires had to be excluded.

Those respondents who failed to respond or return the questionnaires may have had different opinions, views and suggestions from those who did respond and return the questionnaires. Since a high response rate was achieved with both surveys, 62.5% (pharmacist survey) and 75% (customer survey), it may be assumed that the research results are valid since more than 50% of respondents responded in both surveys.

1.5.2 Questionnaire Design

The measurement instrument was pre-coded to enable input of data directly from the questionnaire. The questionnaire for the pharmacist survey contained 43 questions pertaining to demographics, evidence of continuing professional development (CPD) or continuing education (CE), adherence to Good Pharmacy Practice (GPP) rules, provision of pharmaceutical care, staff training, relationship with other health care professionals and the provision of additional

services. These questions were designed to gather information to evaluate professionalism amongst retail community pharmacists. This addressed the first research objective.

The structure of the questions included dichotomous, a Likert type rating scale and open-ended questions. For questions 8-20, a Likert type rating scale was employed. A 5-point scale (always – never) enabled the respondent to indicate how often he or she was involved in those activities. For this section, the respondents were asked to indicate their choice by circling the appropriate number. The numbers were 1 = always; 2 = often; 3 = sometimes; 4 = seldom; 5 = never on which the lower the number, the more favourable was the evaluation.

The questionnaire was four pages long and contained a cover letter which helped to win co-operation of respondents. The questionnaire is attached as Appendix A.

The questionnaire for the customer survey consisted of 52 questions pertaining to demographics, quality of services provided by the pharmacist and employees and evidence of service. These questions were designed to evaluate quality of services as perceived by the customers. This addressed the second research objective.

A Likert type rating scale was used for questions in Sections B, C and D. An agree-disagree scale (5-point scale) enabled the respondent to indicate his or her agreement with the statement. The survey involved numerous evaluative statements that respondents answered using a 5-point scale on which the lower the number, the more favourable was the evaluation.

For these sections the respondents were asked to indicate the extent to which they 'agree' or 'disagree' with each statement by circling the appropriate number. The numbers were 1 = strongly agree; 2 = agree; 3 = unsure; 4 = strongly disagree; 5 = disagree.

Section E included the use of open-ended (free response) questions to obtain opinions and suggestions from the respondents. The use of this type of question is especially useful in exploratory research as it helps to uncover certainty of feelings and expressions of intensity (Cooper and Schindler, 1998). The questionnaire was four pages long and contained a cover letter which informed the potential respondents of what the study was about and more critically, convinced the respondent of the importance of participating in it (refer to Appendix B).

1.5.3 Reliability

Cronbach's coefficient Alpha method was used to assess internal consistency for Sections B, C and D of the customer survey. The Reliability Coefficient Alpha obtained for all three sections indicated a high degree of internal consistency amongst the items in each section (see Appendix C).

1.6 LIMITATIONS OF THE STUDY

- A convenience sample for both retail community pharmacists and customers was employed in this study. Therefore respondents for both surveys were restricted to areas and people most accessible at that time. This may have resulted in some degree of selection bias.

  Although a convenience sample has no controls to ensure precision, it can still be useful in that one can gain ideas about a particular subject of interest (Cooper and Schindler, 1998). Since the study was in the early stages of exploratory research, using such a sample was appropriate and did prove useful.

- The sample size of retail community pharmacists was small (n = 25). However, only 40 questionnaires were distributed to pharmacies making this a relatively high response rate (62.5%). Again, the study involved evaluation of overall trends in the retail pharmacy sector, and sometimes

responses from a survey may tend to be so overwhelmingly one-sided that there is no incentive to interview further.

- Any study employing the use of surveys, more specifically, questionnaires may have some degree of weaknesses in the questionnaire itself. For example, a respondent may not fully grasp the essence of a question, thus affecting the quality of data obtained.

Many patients or customers frequenting pharmacies may not have the knowledge of rules and regulations of the profession. Some may not be aware of their rights as patients or even the pharmacist's responsibility to them, as clients. To a certain extent, some customers may not fully know or understand what is expected from his or her pharmacist. This may have affected quality of data obtained from the customer survey.

Despite these weaknesses, the study was instrumental in demonstrating where pharmacists could improve in terms of enhancing professional aspects of their profession and quality of services provided to customers.

1.7 STRUCTURE OF THE STUDY

Chapter 2 will present some literature review and look specifically at what has been done concerning this topic. Chapter 3 presents an overview of practice standards and related issues in the form of a case study. Chapter 4 covers data analysis and findings. Comparable tables and figures are discussed in this chapter. Chapter 5 presents the research conclusions and recommendations.

1.8 SUMMARY

Some of the many opportunities that retail pharmacies have to be different, lies in both their professional ability and the way in which they can keep their customers happy, i.e. through professionalism and service excellence. The more emphasis placed in this area, the higher will be the standards of practice of the profession and the level of health care services provided to customers.

CHAPTER 2
IN PURSUIT OF EXCELLENCE:
PROFESSIONALISM AND QUALITY OF SERVICE

2.1 INTRODUCTION

This chapter will examine the concepts of professionalism and quality of service delivery more closely. Issues related to definitions, determinants and measurement will be examined. A review of existing literature and previous research will also be discussed.

2.2 PROFESSIONALISM

Professionalism is defined as the "qualities, typical features or the 'stamp' of a profession (*Oxford Dictionary*). The concept of professionalism can therefore be seen to include those characteristic elements related to the practice of the profession, that serve to make up or enhance the professional image and status of that profession.

More recently, the focus of the 'professionalism' concept is being used as a valuable marketing tool and as part of many strategic theories. This has implications for both the pharmaceutical industry as well as the consumers. For the pharmacist, higher levels of professionalism means higher standards of practice of the profession, thus enhanced professional image and status levels for the customer, this means higher levels of health care services provided to them and added value benefits to the community.

Every year an award is sponsored by the Pharmacy Professional Awareness Campaign (PPAC) and Boehringer Ingelheim, an international pharmaceutical company, to acknowledge the highest standards of excellence within community pharmacy. Another aim of this campaign is promoting professionalism by improving the standard of retail pharmacy practice to ultimately deliver a quality service to the customer (*Modern Pharmacy*, March 2001).

In addition to certain nomination criteria, the award is based on professionalism and community involvement of each nominee. Each year the winner sets a benchmark for other community pharmacists to measure their professionalism against. The *Journal of Modern Pharmacy* details the profiles of those pharmacies nominated each year as well as those pharmacies that have created an impact in many communities. These profiles were looked at closely, to establish elements of professionalism within community pharmacy.

In search for a definition of the term "professionalism" at the level of retail community pharmacists, various streams of thinking emerge. In this study, the elements of professionalism that will be examined include:

2.2.1 Professional Knowledge and Continuing Education

With medicine having entered the realm of high-tech, there is a corresponding need for pharmacists' information to become high-tech. Pharmacists have a professional obligation to the patients, themselves and the profession to keep abreast of technological advancements in drug therapy and pharmaceutical care management.

Pharmacy is a dynamic profession where the body of knowledge is constantly changing. Learning does not cease at the point of graduation (Carapinha, 2001). The value of increasing knowledge and improving skills is a definite way to maintain a level of competence sufficient to provide effective and efficient pharmaceutical care. Thus, the implementation of a system of continuing professional development (CPD) or continuing education (CE) and the involvement of pharmacists in CPD or CE is essential in developing and maintaining competencies in areas that may be very different to those covered during undergraduate training (SAPC Annual Report, 2000).

A recent study at Rhodes University, South Africa, regarding the factors influencing the provision of pharmaceutical care, revealed that in order to provide new innovative pharmacy services, additional training and knowledge,

amongst other factors, were essential (FIP Abstracts, August 2000). Another study conducted at the College of Pharmacy Practice, Great Britain, also revealed the pharmacist's knowledge and skills, amongst other important factors, as essential for the development of pharmaceutical care (FIP Abstracts, August 2000).

CPD has become the focus of much greater attention over the past few years – an essential way of maintaining competence and enhancing professionalism (*Pharmaciae*, November 2000). CPD activities could either be:

Formal - attending CE seminars and symposia, undertaking formal studies or attending lectures/meetings/workshops.

Informal - reading of journal articles and publications, reading and using information sent by mail from pharmaceutical companies.

In South Africa many societies and institutions are involved in providing CE programmes and courses, although there is still uncertainty as to whether it should be attempted in a voluntary or mandatory basis (Kairuz, 2000). According to studies by Kairuz (2000), the majority of South African pharmacists want voluntary, structured CE, available in various formats with suitable accreditation. According to Plunkett, 1997 in Kairuz (2000), a recent Australian survey indicated a change in attitude with the majority of pharmacists indicating a preference for mandatory CE.

A study conducted by the SAPC in 1997, revealed that of 4641 pharmacists who responded to a council questionnaire on formal professional development, 1023 or 22% indicated that they had undergone some form of training (Bolleurs, 1999).

In another study to find out whether pharmacists were equipped to meet Good Pharmacy Practice (GPP) guidelines, professional knowledge was measured. This research revealed that 50% of the pharmacists had completed a CE course during the past year and 75% had completed a CE course during the previous two years. It was concluded that in the absence of CE Standards, the data suggests a moderate to low commitment to lifelong learning (Futter, 1999).

Previous studies have shown a sudden new surge of awareness among pharmacists of the need for on-going professional development (*Modern Pharmacy*, February 1999), but are pharmacists being proactive and are they taking advantage of these opportunities as a means of enhancing their knowledge and professionalism? Simply forcing them to get involved in these programmes may not necessarily have any influence on their professional practice. At the end of the day, the onus is upon the pharmacist to ensure a continued high level of professional skill and knowledge by means of CE or CPD. As Professor Peter Eagles, President of the SAPC, puts it, "Competent pharmacists we have, but the country needs more" (SAPC Annual Report, 2000).

2.2.2 Compliance with Good Pharmacy Practice (GPP) Standards

Guidelines for Good Pharmacy Practice (GPP) have been detailed in a booklet and published by the SAPC to inform pharmacists what is expected of him/her. These sets of guidelines help to establish the nature, extent and standard of pharmaceutical services in retail community pharmacies (*Pharmaciae*, June-September 1999). These guidelines include issues related to registration details, premises and layout, equipment, reference books, storage and control of medicines, dispensing of prescriptions, provision of pharmaceutical care, record keeping and other general issues.

Adherence to GPP guidelines by pharmacists is essential in the delivery of effective pharmaceutical services, especially in pharmacies where there is a need to improve services. Compliance with GPP rules is also a way of upgrading the level of care and practice in the pharmacy – a definite way of enhancing professionalism.

A study carried out to establish whether pharmacists were equipped to meet GPP guidelines, one of the features measured was communication privacy (Futter, 1999). It was found that one-third of the pharmacies had counselling booths at the dispensary counter and 50% had a consultation room. GPP

guidelines for communication privacy and confidentiality are clearly specified and the study concluded that the communication structures of most of the pharmacies did not meet these standards (Futter, 1999).

Inspection of pharmacies by SAPC inspectors during 2000 indicated that in community pharmacies the lack of suitable waiting areas and semi-private areas for the provision of advice remains a serious shortcoming (*Pharmaciae*, December 2001).

GPP guidelines and standards as well as other pharmacy practice related issues will be discussed in greater detail in Chapter 3.

2.2.3 The Provision of Pharmaceutical Care

The professional orientation of pharmacists has recently been a shift to patient care. This new practice philosophy of pharmacists is termed "pharmaceutical care" and in many ways, being seen as the mission of the pharmacy profession (Blott, 2001). According to Hepler and Strand (1990) "Pharmaceutical care is the responsible provision of drug therapy for the purpose of achieving definite outcomes that improve a patient's quality of life" (Blott, 2001).

The provision of pharmaceutical care is listed under the GPP guidelines and is discussed here, separately, since the concept has in recent times been gaining more recognition. The pharmaceutical care process is viewed as a structured operating system within which clinical pharmacy can be practised (Boschmans and Perkin, 1999). The process includes:

Establishing the patient's needs and identifying therapeutic problems.
Development and implementation of a patient-specific care plan.
Evaluating adherence and compliance with treatment.
Monitoring and continuous follow-up of the patient's clinical condition.
Documentation of all patient care activities.

"Pharmaceutical care is mainly about optimising drug therapy and there are no other healthcare professionals better placed than pharmacists to take charge in this area" (Boschmans and Perkin, 1999).

An important aspect of pharmaceutical care is pharmacist intervention. An example of clinical interventions by the pharmacist is the actions that a pharmacist takes when dispensing a prescription where the prescriber has to be contacted. These actions have significant implications for:

The patient, in terms of clinical improvement and possible health cost savings.

The pharmacist, in terms of providing a professional service, thus improving image of the pharmacy and raising industry standards.

The findings of a research study carried out at the University of Wales, UK, supported the importance of community pharmacists' interventions as a practical and feasible approach in the provision of pharmaceutical care in the community setting (FIP Abstracts, 1999).

Although pharmaceutical care may still be in its infant stages in South Africa, it seems to be that this is the way of progression for the profession. This can only be viewed in a positive light, both for the professional image of the pharmacist and for the enhancement of patient well-being.

2.2.4 The Supply of Additional Services and Community Involvement

Trends in retail pharmacy show pharmacies extending beyond the boundaries of simple retailing to include the provision of additional services to provide customers with a comprehensive primary healthcare service. A comprehensive offering of healthcare services to create a total healthcare unit can be of great benefit to:

The community, as they will be able to find a choice of affordable healthcare expertise all under one roof.

The pharmacist, since these services offer good business opportunities – services can be marketed, creating exposure and enhanced professional image of the pharmacist.

Additional services include the supply of "special services". Special services are those services that a pharmacy offers to the community as part of preventative healthcare, some of which include diagnostic and screening tests, e.g. blood pressure/glucose and cholesterol testing. The introduction of in-house clinics, e.g. family planning, baby, asthma, immunisation clinics can also be viewed as part of special services. Many pharmacies also employ nurses to run these clinics.

A recent study carried out at Potchefstroom University, South Africa regarding the utilisation of nurses in community pharmacies in a developing country, revealed that with a shortage of doctors and limited resources, a clinic service can be operated in pharmacies with great success and savings to members of all levels of the community (FIP Abstracts, 2000).

The provision of these services will not only meet the growing demand for these services in South Africa, but will also, more importantly, serve as a vital screening tool for patients and facilitate GP referrals if necessary.

The involvement of the pharmacist in community related issues, e.g. drug awareness campaigns, promotional activities, projects, holding talks in schools or social organisations, can all serve to add value to the community and at the same time, give the pharmacist an opportunity to gain prominence and enhanced professionalism.

The institution of a "Pharmacy Week" on the national health calendar by the Department of Health is also an ideal opportunity to create awareness in the community on health related issues. Being a "Drug Wise" pharmacist also creates an opportunity for pharmacists to market their services as the first point of help for medicine and drug problems. The "Drug Wise" pharmacist is promoted as a caring professional who provides a value-added service to the

community, can give advice on medication that might contain potentially addictive substances, gives preventative counselling advice on substance abuse and at the same time, can offer immediate referrals to professional rehabilitation centres, if necessary (*Modern Pharmacy*, June 2000). Since 1991, Drug Wise has trained nearly 700 pharmacists countrywide (*Modern Pharmacy*, June 2000).

2.2.5 Expanding the Role of Pharmacy Staff

Running a successful business in any industry requires a high level of professionalism and, at the same time, relies on the skills and experience of highly qualified and dedicated staff members. The emphasis here will be the extent to which the pharmacist is involved in training and improving the skills of employees.

Pharmacy staff are important support personnel in community pharmacy (Osman, 2001). Therefore, developing and maintaining their competence will benefit both:

The pharmacist, in terms of superior services provided and thus enhanced professional image; and

The customer, in terms of high levels of healthcare services and customer satisfaction.

In 1997, new laws were put in place to make proper provision for pharmacist assistants (Beaumont, 2001). The promotion of the assistant's role and training is of fundamental importance in delivering higher quality services to customers and at the same time, give them their own professional status, e.g. registration with the relevant institution. This is an opportunity to contribute immensely to the growth and development of the retail pharmaceutical sector in South Africa.

Many institutions and associations have initiated learnership and training programmes for pharmacist assistants with the long-term objective of increasing the resource pool of pharmaceutical expertise available to all South Africans.

Learnership and training programmes could also be informal, e.g. systematic in-house training which can provide the following benefits:

Improves professional status of employees in customer service.

Develops communication within employees in the pharmacy and promotes teamwork;

Builds up a good community spirit;

Can support worker motivation.

2.2.6 Pharmacist's Relationship with Other Health Care Professionals

An extract from the GPP document states that:

> "A pharmacist must at all times endeavour to co-operate with professional colleagues and members of other health professions so that patients and the public may benefit" (*Pharmaciae*, October-December 1999).

It is obvious that different health professions aim at the same result of optimal treatment of their patients. Therefore, there is an increasing need for greater co-operation between pharmacists and other health care professionals. It would be in the best interest of the patient for the pharmacist to establish a good working relationship with the patient's doctor (or any other health care professional) to achieve an optimal management strategy.

2.2.7 Ethical Behaviour and Code of Conduct

The pharmacy profession, like many other professions, has a formal, written ethical code which serves as a guide for the ethical conduct of members.

Therefore, pharmacists, as professionals, are required to practise within the law and at the same time, to comply with their Code of Ethics. The pharmacist also has a trading role to perform involving the expectation of commercial profits. Situations can arise which involve both ethical and legal issues, leaving the pharmacist in an ethical dilemma.

According to Truter (2000), one of the most common misconceptions about business is that there is a contradiction between ethics and profits. "Being ethical does not necessarily guarantee success but it does strengthen the professional qualities of the pharmacy business performance and a business's competitive position over the long-term." Being ethical maintains and enhances the honour and dignity of pharmacy and therefore professionalism.

For purposes of this study, the measuring instrument was designed to be applicable to professionalism amongst retail community pharmacists, encompassing statements for each of the elements of professionalism mentioned above except for ethical behaviour. The concept of ethics is an intangible one and would have been difficult to evaluate in this study, since observational studies would have been necessary to characterise behaviour as ethical or unethical. It has been mentioned here, as an element of professionalism, due to it forming an integral part of the pharmacy profession.

2.3 SERVICE QUALITY

"Customer is King"
"Quality begins with the customer"
"The customer is the sole judge of quality"

These are some of the popular slogans used in the world of business and quality movement that deserves mentioning, as each one holds some significance in the concept of service quality.

2.3.1 Defining Service Quality

The quest for quality in products and services has been hailed as an important consumer trend since the early 1980s (Berry *et al.* 1985). According to Japanese philosophy, quality is "zero defects – doing it right the first time" (Berry *et al.* 1985). It may be fairly easy to recognise a quality product or service when one sees it, but to define exactly what it is, is difficult. Consumers often cannot "see" the service, therefore making the recognition of service

quality an extremely subjective process (Truter, 2001). Defining quality is therefore difficult, since it is not a property that has an absolute meaning.

Previous studies have indicated that it is more difficult for the consumer to evaluate service quality than goods quality, that service quality perceptions result from a comparison of consumer expectations with actual service and that quality evaluations are not made solely on the outcome of a service, but also involves evaluations of the process of service delivery (Berry *et al.* 1985).

According to Berry and Parasuraman, 1991 the intangible, heterogeneous and inseparable nature of services make the concept of "service quality" a difficult one to evaluate. Previous studies in Berry *et al* (1985) indicate that:

> Service quality is a measure of how well the service level delivered matches customer expectations – on a consistent basis.

"Perceived quality" is often the term used instead. It involves the comparison of customers expectations with their perceptions of actual service performance (Truter, 2001). In Truter (2001), perceived quality is therefore an attitude that represents a general overall appraisal of the quality of a service, also implying that the customer is the sole or ultimate judge of quality.

2.3.2 The Determinants of Service Quality

Despite the challenges posed, a conceptual framework of the determinants of service quality has been introduced. The model proposed by Parasuraman *et al* has gained the widest acceptance (Truter, 2001). This framework consists of ten potentially overlapping dimensions (Figure 1): reliability, access, understanding of the customer, responsiveness, competence, courtesy, communication, credibility, security and tangibles. In assessing or evaluating service quality customers compare the service they receive (perceptions) with the service they desire (expectations).

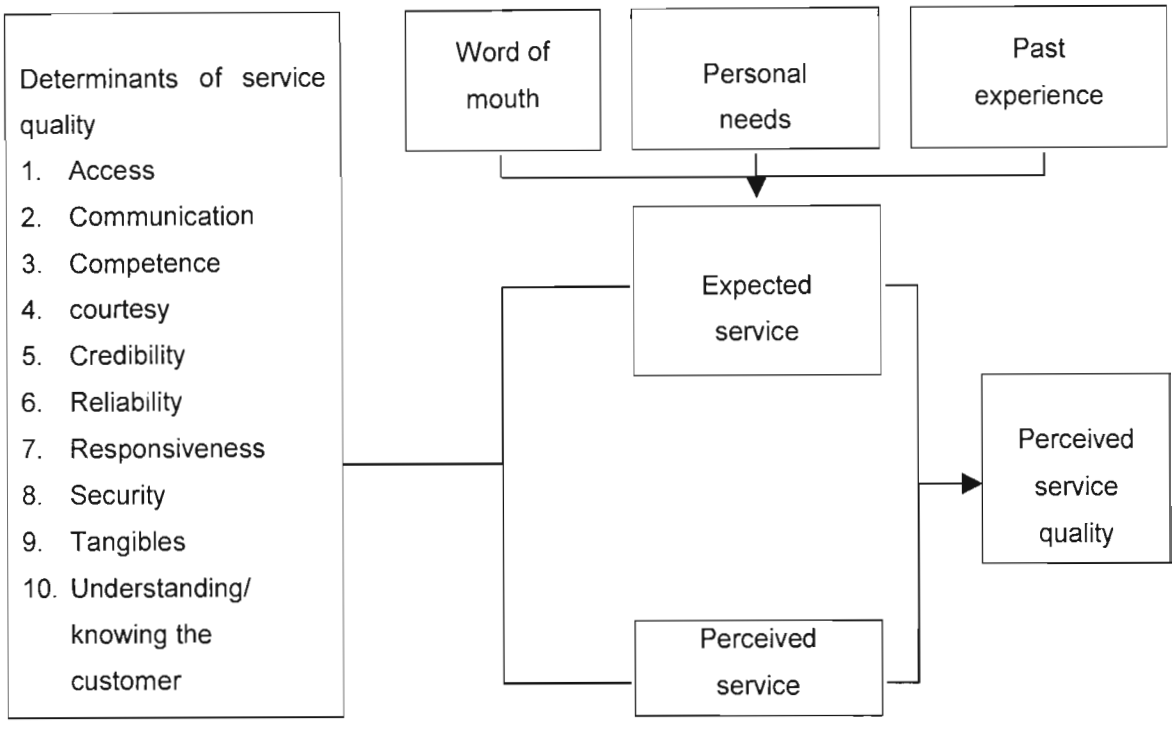

Figure 1 : Determinants of Perceived Service Quality

According to Berry *et al* (1985), the components of the ten determinants of perceived service quality can be described as follows:

Reliability:	Involves consistency of performance and dependability, performing the service right the first time and honouring promises.
Responsiveness:	Concerns the willingness of employees to provide service and timeliness of service.
Competence:	Possession of the required skills and knowledge to perform the service.
Access:	Involves approachability and ease of contact.
Courtesy:	Involves respect, politeness, consideration and friendliness of personnel.
Communication:	Means keeping customers informed and listening to them.
Credibility:	Involves trustworthiness, honesty and having the customers' best interests at heart, e.g. company name and reputation and personal characteristics of personnel.

Security:	Is the freedom from danger, risk or doubt, e.g. confidentiality.
Understanding/ knowing the customer:	Involves making the effort to understand the customer's needs.
Tangibles:	The physical evidence of service.

In Berry *et al* (1990), these ten dimensions were redefined by further research into five core dimensions, namely:

Tangibles:	The appearance of physical facilities, equipment, personnel and communication materials.
Reliability:	The ability to perform the promised service dependably and accurately.
Responsiveness:	Willingness to assist customers and provide prompt service.
Assurance:	Refers to knowledge, skill and courtesy of employees and their ability to inspire trust and confidence.
Empathy:	Characterised by caring and extent to which customers receive individualised attention and service.

For purposes of this study the measuring instrument was designed to be applicable to quality of services provided to customers in community pharmacies, encompassing statements for each of the five service quality dimensions mentioned above.

2.3.3 The Five Core Dimensions of Service Quality Applied to a Pharmacy Setting

Customers provide the best test of quality since judgement is based on experience. But are customers or the public equipped to judge the quality of patient care services? One of the cornerstones of professionalism is the fact that members of the general public do not have the expertise to decide what drugs to use to meet their pharmaceutical needs. They expect to be able to

trust the profession to look after their best interests and rely on self-regulation by the profession.

The public or customers will therefore judge the quality of patient care services provided by pharmacists using the same criteria they use for all healthcare professionals – caring, concern, empathy, confidentiality, respect for the need for privacy and a sincere commitment to listen and understand. Customers will believe that professional quality is being provided to the extent that pharmacists meet or beat these expectations. Applying the five dimensions of service quality to a retail community pharmacy setting the following will be discussed:

2.3.3.1 Tangibles

The physical evidence of services comes through in assessing the appearance of physical facilities, equipment and personnel. Many characteristics of the physical facilities impact on service quality:

- Location of the pharmacy, e.g. how far must the customer travel to the pharmacy.
- Climate or "atmosphere" in which service delivery takes place in the pharmacy is important as it contributes to quality of entire service process. An atmosphere of pervasive warmth, friendliness and a "personal touch" can create an environment in which customers feel comfortable and will keep them coming back, rather than a pharmacy which breeds a hostile environment, e.g. employees arguing with each other or another customer.
- Store layout should include spacious areas with no congestion so that customers can move around freely and easily find things that they are looking for.
- Environment should be clean and tidy and pleasant to shop in.
- The provision of suitable counselling areas that allow for customer privacy.

The appearance of personnel can also impact on service quality. Employees who are neatly attired with an eagerness to serve, can only serve to enhance the quality of service provided.

2.3.3.2 Reliability

Keeping customers happy is a priority and when services are provided accurately and dependably, this can only result in satisfied customers. For example, if a customer is promised that he/she will received their medication by a certain time, these promises must be honoured by the pharmacy, as making mistakes and being careless can result in customers losing confidence in that pharmacy's reliability.

Previous studies in Berry *et al* (1990) indicate that service reliability is the service "core" to most customers. In these studies, respondents rated reliability as the single most important feature in judging service quality. Providing outstanding service reliability can result in outstanding service quality, which in turn is likely to earn the confidence of customers, and it has been said that "the confidence of customers is the greatest asset a company can have" (Berry *et al.* 1990).

When a customer experiences a problem with a service, the manner of problem resolution becomes crucial – if handled correctly, one can win the customer back, but arguing with a customer leads nowhere and very often results in loss of the customer. After all, it is very often said that the "customer is king". Keeping that in mind and acknowledging that "reliability is at the heart of excellent service" can serve as a good foundation on which to build a reputation for outstanding service quality.

2.3.3.3 Responsiveness

Pharmacy staff must show eagerness and willingness to assist customers and at the same time provide prompt service. Very often customers are made to wait for long periods for staff to finish what they are doing (e.g. conversation with other staff members or private phone calls) before they receive service (*Front Shop*, August 2001).

Customers begin their evaluation of the service quality process when they enter the pharmacy, a waiting line is often the first thing they notice. A long waiting time for a sick customer may lead to negative perceptions of service quality.

With time being such a big factor in most people's lives nowadays, providing customers with prompt service and minimizing their waiting time is the only way to go. Services must be available when customers require them – business hours must be consistent, reasonable and known to customers. A system should also be in place to efficiently handle emergency situations.

2.3.3.4 Assurance

The knowledge, skills and courtesy of employees and their ability to inspire trust and confidence is an important dimension customers use to judge service quality.

Staff training and career development is a very necessary operation – both pharmacists and staff must be continually educated and trained to keep up to date with new developments and changes in the pharmaceutical and health care areas, in order to provide a higher quality of services to their customers.

Customers need to be shown respect for their need of privacy and confidentiality. The pharmacist and customer or patient need to establish a bond that makes their communication channel easy. A one-to-one relationship between the two is important in establishing trust so that the patient feels free to ask the pharmacist about almost anything.

2.3.3.5 Empathy

Patients need to feel cared for and understood by health professionals. Numerous studies have shown that patient satisfaction with the patient-provider relationship improves compliance with treatment (Berger, 2000).

Pharmacists need to show caring, concern and a sincere commitment to listen and understand. These qualities and skills are valuable in developing trust between patient and pharmacist and trust is critically important since patients expect to be able to trust the profession to look after their welfare and best interests. Also, feeling understood and cared for strengthens the therapeutic alliance between patient and provider, which in turn improves adherence to treatment (Berger, 2000).

These findings have important implications for pharmacy practice. It stresses the need for pharmacists to build and maintain effective relationships with patients so that the good and well-being of these patients is promoted.

Another dimension of service quality that was included in the study and deserves mentioning is:

- Patient Education

Patients are becoming more knowledgeable about medical matters, especially now with access to the internet. However, a recent study led by researchers at the Harvard Medical School found that more than half of all prescription drugs are taken incorrectly (Barker, 2000). The public may not be as medically aware as some would like to believe, thus there is clearly a great need for patient education as an ongoing exercise.

Effective communication and interactive counselling skills are basic components of every health care service. Effective patient counselling is not simply the provision of information, it is the way in which it is carried out that is critical in determining what the patient understands and remembers (Berger, 2000). The more pharmacists educate their patients, the more likely those patients are to comply with their treatment regimens.

When a customer leaves a pharmacy knowing that he or she has been given all the information needed and more, that is most likely to impact positively on their perception of quality of that service delivery.

In this study the quality of services as perceived by customers in retail community pharmacies was evaluated by service encounters with the pharmacist and employees and the general evidence of service. Service encounters can play a prominent role in determining a customer's satisfaction with the business. Services are performances and people render these performances. From the customers' perspective, the people performing the service are the company. For example, an "incompetent pharmacy employee" is an incompetent pharmacy.

If the quality of services provided does not meet customer expectations, this news is very likely to spread through word-of-mouth communication. If on the other hand, services meet or exceed customer expectations, the reaction is positive. The delighted customer will most likely tell other people as well – which is what the aim of every business should be, i.e. find out customers' expectations and formulate standards toward which the business should aim, to delight customers.

2.4 SUMMARY

Retail community pharmacists must play a proactive role in increasing the quality of life for the community they serve. In doing this, they must adopt a strategic orientation that incorporates customers' changing needs. Higher levels of service differentiation coupled with service excellence and professionalism have recently been important aspects of some of the latest strategic theories (Bhoola and Makin, 2001).

In this chapter the element or dimensions of the two concepts, i.e. professionalism and service quality, were discussed in great detail. In doing so, it becomes clear that using professionalism as part of a strategic orientation for the pharmacy is likely to result in higher levels of service provided to customers. Similarly, the provision of high levels of service to customers can enhance professional status of the pharmacist.

The evaluation of these two factors in this study can then serve to:

- Bring to light important issues relevant to professionalism of retail community pharmacists – how can he or she improve or enhance professional image and status to ultimately deliver higher quality services.
- Bring to light customers' perceptions of quality of services in general in retail community pharmacies – are they satisfied and what can be done to improve services and healthcare for the community as a whole.

CHAPTER 3
AN OVERVIEW OF GOOD PHARMACY PRACTICE (GPP) STANDARDS AND RELATED ISSUES

3.1 INTRODUCTION

The function of assessing professional services is delegated to statutory agencies. Internationally, all professions are feeling pressure to tighten up on their standards and control quality. Pharmacy is no exception (*Modern Pharmacy*, September 1999).

The World Health Organisation (WHO), International Pharmaceutical Federation (FIP) and pharmacy controlling bodies in many countries have gone to great lengths to establish initiatives to introduce quality assurance programmes of community pharmacy (*Modern Pharmacy*, September 1999). Professional standards have been developed and applied rigorously. The SAPC has been instructive in developing a set of entry level competencies for pharmacists and has published a booklet *Guidelines for Good Pharmacy Practice*, 1997 (*Modern Pharmacy*, September 1999).

An overview of GPP guidelines, Objects of Council and other related issues will be examined in this chapter.

3.2 GOOD PHARMACY PRACTICE (GPP) STANDARDS

In terms of the Pharmacy Act, 1974, as amended, the objects of the SAPC include to

> "uphold and safeguard the rights of the general public to universally acceptable standards of pharmacy practice in both the private and public sector" and to "establish, develop, maintain and control universally acceptable standards of practice."
> (*Pharmaciae*, December 2001).

One of the ways of improving the practice of pharmacy is the inspection of pharmacies by SAPC inspectors. The Guidelines for GPP provides a strong base for the setting of standards of pharmacy in South Africa. These guidelines define the fundamental principles in community pharmacy practice and serve to emphasize the professional and ethical principles in pharmacy services.

The monitoring of compliance with GPP standards by Council inspectors is carried out at least once a year in every pharmacy by means of questionnaires. Extracts from the questionnaire to establish the nature, extent and standard of pharmaceutical services in retail community pharmacies include:

- Registration Details. e.g. The name of the pharmacist being displayed at the main pharmacy entrance, valid annual registration for the pharmacist.
- Premises and Layout. e.g. clean, tidy and organised premises, suitable waiting areas.
- Equipment. e.g. suitable and sufficient equipment to carry out necessary activities.
- References. e.g. latest edition of GPP Manual, Martindale, MIMS, etc.
- Storage and Control of Medicines. e.g. correct temperature in the pharmacy, availability of a refrigerator for correct storage of thermo labile medicines.
- Dispensing of Prescriptions. e.g. person responsible for actual dispensing and handing out of medicines to the patient.
- Provision of Pharmaceutical Care. e.g. all patient care process activities.
- Record Keeping. e.g. records of patient profiles and medication dispensed, original prescriptions being kept for 3 years.
- General. e.g. no smoking policy, involvement in CPD.

(*Pharmaciae*, July-September 1999).

After inspection, feedback is provided to the pharmacist with a copy of the inspection report (SAPC Annual Report, 2000). This is useful to the pharmacist as it provides a method of control and any shortcomings highlighted can then be rectified. Re-inspections may also be performed to check whether corrective actions have been taken to rectify those shortcomings.

3.3 OBJECTS OF THE SAPC

Some of the other objects of the SAPC in terms of the Pharmacy Act 1974, as stated in the Annual Report (2000), include:

- Assisting in the promotion of health of the population.
- Promoting pharmaceutical care which complies with universal norms and values.
- Establishing, developing, maintaining and controlling universally acceptable standards:
  - in pharmaceutical education and training
  - of professional conduct
- maintaining and enhancing the dignity and integrity of the pharmacy profession.

Many aspects of the above-mentioned objects have been previously covered in Chapter 2. A closer look at pharmaceutical education and training, more specifically CPD, will now be done.

3.4 CONTINUING PROFESSIONAL DEVELOPMENT

In terms of the Pharmacy Act, 1974, as amended, the SAPC may require any person registered with Council, to remain competent to practise (SAPC Annual Report, 2000). Lifelong competence, which encompasses knowledge, skills and attitude to practise, is essential to public interest.

The SAPC has already accepted minimum criteria to be used to ensure quality of programmes and courses for pharmacists and have approved courses by a number of providers (*Modern Pharmacy*, May 2001). The Pharmaceutical Society of SA (PSSA) also launched its CPD programme in May 2000 (*SAPJ*, January 2001). Involvement of pharmacists in these programmes could then form part of their portfolio development.

At a Pharmacy Council meeting held in March 2001, it was decided that CPD will not be based on the collection of points but rather on the assessment of

competence of the pharmacist to practise his/her profession and assessment will take place by means of practice audits whereby the pharmacist's competence or performance portfolio will be randomly sampled (SAAHIP Newsletter, July 2001). Where necessary, follow-up action will be taken, e.g. remedial action.

3.5 PATIENTS' RIGHTS CHARTER

This was released recently by the Minister of Health and should be known to all pharmacists, since the practice of pharmacy should reflect respect for the rights of patients at all times (*Pharmaciae*, February 2000).

This charter includes patients' rights to:

- A healthy and safe environment.
- Participation in decision-making.
- Access to health care.
- Knowledge of one's health insurance or medical aid scheme.
- Choice of health services.
- Treatment by a named health care provider.
- Informed consent
- Confidentiality and privacy
- Refusal of treatment.
- A second opinion.
- Continuity of care.
- Complaints about health services.

While patients have a right to quality pharmacy care, at the same time, the patient as a client also has certain responsibilities. These include being reasonable and courteous, assisting the pharmacist in complying with legal requirements relating to medicine, using medicine with care and reporting any problems experienced.

3.5 PROFESSIONAL CONDUCT

Pharmacists as professionals have an obligation to practise within the law and abide by the "Ethical Rules" and code of conduct as laid down by the SAPC. This was previously discussed under Chapter 2.

3.6 SUMMARY

All pharmacies have to be conducted in compliance with GPP standards and other applicable legislation (SAPC Annual Report, 2000). Adherence to legislation is essential in upholding the honour and dignity of the profession. The new practice regulations describe for the first time the broad scope of practice of the pharmacist (SAPC Annual Report, 2000). While these particular services (which form part of the scope of practice of the pharmacist) can pose exciting challenges to pharmacists, they can also seriously damage the image of the profession if the quality of these services is not properly controlled.

CHAPTER 4
EVALUATION OF DATA ANALYSIS AND FINDINGS

4.1 INTRODUCTION

The raw data from the questionnaires must undergo preliminary preparation before they can be analysed (Aaker *et al.* 2001).

The first step therefore involved editing and data entry which ensured accuracy of data and its conversion from raw form to reduced and classified forms that were more appropriate for analysis.

The measuring instruments for both surveys included closed-ended questions that were pre-coded which simplified the data entry process. Both surveys also included the use of open-ended questions. These questions encouraged disclosure of complete information. Content analysis was the method used to analyse open questions which was particularly useful in providing insight on data patterns.

The next step was to tabulate the data. The primary use of tabulation was to determine the empirical distribution of the variable in question and calculate the descriptive statistics. A frequency distribution simply reports the number of responses that each question received (Aaker *et al.* 2001). Descriptive statistics helps to summarise the information presented in the frequency table.

Cross tabulations were implemented to assess or inspect the relationships between nominally scaled variables. Bar charts and pie charts were used for relative comparisons of nominal data.

The data analysis and findings for the pharmacist survey are presented first, followed by analysis and findings for the customer survey.

4.2 DATA ANALYSIS AND FINDINGS: PHARMACIST SURVEY

The survey amongst retail community pharmacists was carried out in an attempt to determine the extent of involvement of pharmacists in those aspects related to enhancing professionalism. Thus, the findings here will give some indication of how retail community pharmacists are responding to the needs of a changing South African society.

4.2.1 Frequencies

No of respondents (n) = 25

Table 1 below depicts the sample demographics by gender.

Table 1 : Gender of the Pharmacists

P1 Gender of pharmacist

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	16	64.0	64.0	64.0
	Female	9	36.0	36.0	100.0
	Total	25	100.0	100.0	

As can be seen from Table 1, 64% of the pharmacists were male and 36% were females. This is also clearly represented by the pie chart (Figure 2).

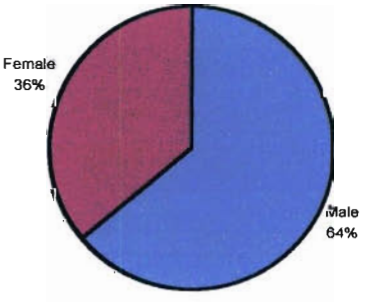

Figure 2 : Gender of the Pharmacists

As depicted by Table 2 most of the pharmacists (48%) belonged to the '31-40' age group category. 24% belonged to '21-30' category, 20% belonged to '41-50' category and a minority (8%) belonged to '51-60' category.

Table 2 : Age of the Pharmacists

P2 Age of pharmacist

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	21-30	6	24.0	24.0	24.0
	31-40	12	48.0	48.0	72.0
	41-50	5	20.0	20.0	92.0
	51-60	2	8.0	8.0	100.0
	Total	25	100.0	100.0	

This is also clearly represented by Figure 3 below.

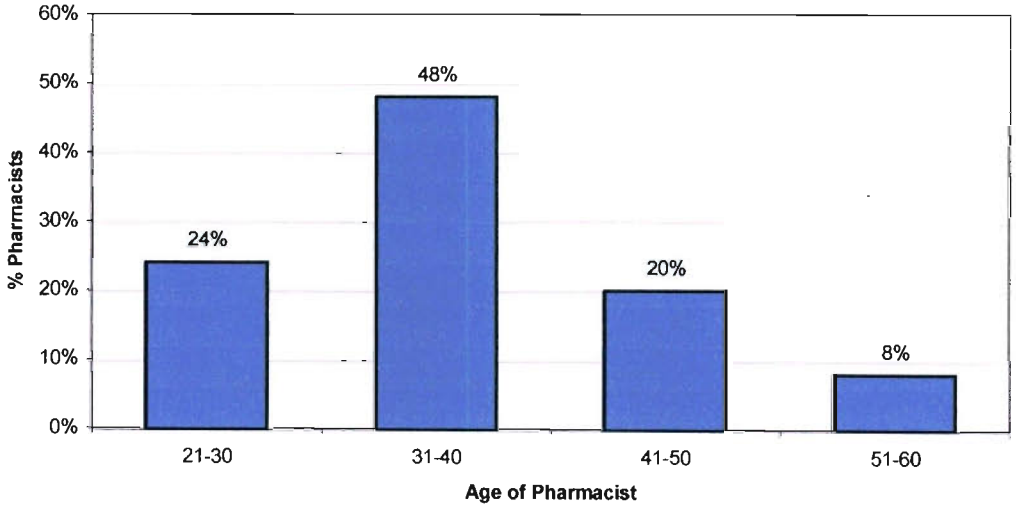

Figure 3 : Age of the Pharmacists

From Table 3 below it can be seen that most pharmacists (92%) had individually owned pharmacies while 4% had group owned pharmacies and the remaining 4% formed part of chain pharmacies.

Table 3 : Type of Pharmacy

P3 Type of Pharmacy

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Group	1	4.0	4.0	4.0
	Chain	1	4.0	4.0	8.0
	Individually owned	23	92.0	92.0	100.0
	Total	25	100.0	100.0	

Table 4 depicts involvement of pharmacists in formal CPD or CE courses. 84% of the pharmacists indicate involvement at some stage, while 16% show no involvement.

Table 4 : Involvement in formal CPD or CE Courses

P5 Continuing education courses or formal professional dev Training

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	21	84.0	84.0	84.0
	No	4	16.0	16.0	100.0
	Total	25	100.0	100.0	

Table 5 indicates involvement of pharmacists in community related issues, e.g. drug awareness campaigns, talks given in schools or clinics. 20% of pharmacists indicated that they were always involved in such issues, 16% were often involved, 8% were sometimes involved and majority (56%) of pharmacists indicated that they were seldom involved in such issues.

Table 5 : Involvement of Pharmacists in Community Related Issues

P8

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Always	5	20.0	20.0	20.0
	Often	4	16.0	16.0	36.0
	Sometimes	2	8.0	8.0	44.0
	Seldom	14	56.0	56.0	100.0
	Total	25	100.0	100.0	

This is also clearly represented by Figure 4 below.

Figure 4 : Involvement of Pharmacists in Community Related Issues

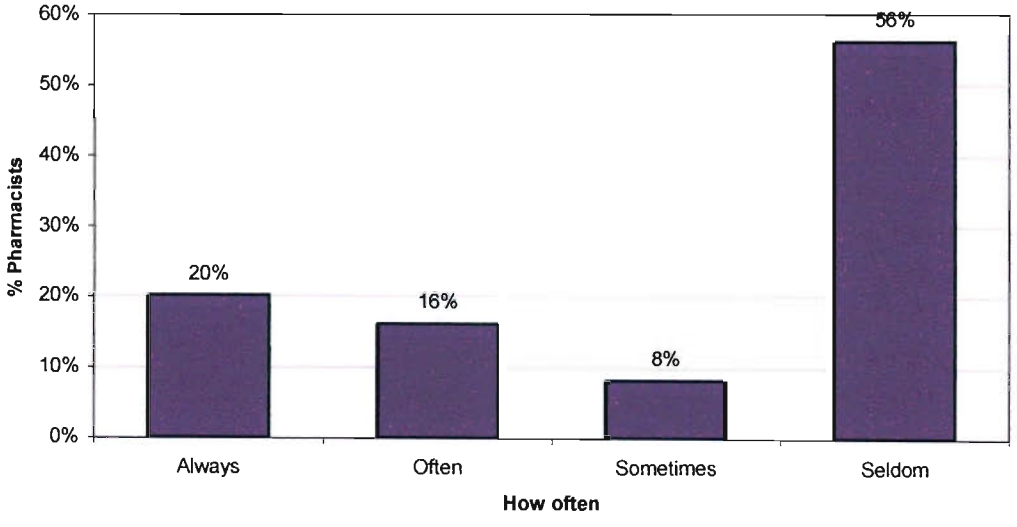

Table 6 depicts involvement of pharmacists in promotional activities to create awareness, e.g. during Pharmacy Week. 20% of pharmacists were always involved, 40% were often involved, 20% were sometimes involved and 20% were seldom involved in such activities.

Table 6 : Involvement of Pharmacists in Promotions and Activities to Create Awareness, e.g. during Pharmacy Week

P9

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Always	5	20.0	20.0	20.0
	Often	10	40.0	40.0	60.0
	Sometimes	5	20.0	20.0	80.0
	Seldom	5	20.0	20.0	100.0
	Total	25	100.0	100.0	

Table 7 depicts whether pharmacists were "Drug Wise" or not. 32% of the pharmacists were "Drug Wise" while majority (68%) were not.

Table 7 : Drug Wise Pharmacists

P21 Are you a Drug Wise Counsellor

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	8	32.0	32.0	32.0
	No	17	68.0	68.0	100.0
	Total	25	100.0	100.0	

In Table 8, it can be seen that 20% of the pharmacists were always involved in in-house staff training, 48% were often involved, while 32% were seldom involved.

Table 8 : Involvement in In-House Training

P12

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Always	5	20.0	20.0	20.0
	Often	12	48.0	48.0	68.0
	Seldom	8	32.0	32.0	100.0
	Total	25	100.0	100.0	

Table 9 indicates whether staff are registered pharmacy or pharmacist assistants or not. 36% of pharmacists indicated that their staff were registered while 64% indicated that staff were not registered as such.

Table 9 : Are any of your staff registered pharmacy or pharmacist assistants?

P22 Are any of your staff registered pharmacy or pharmacist assistants

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	9	36.0	36.0	36.0
	No	16	64.0	64.0	100.0
	Total	25	100.0	100.0	

Figure 5 reflects that in individually owned pharmacies 35% of pharmacists had registered pharmacist assistants and 65% did not.

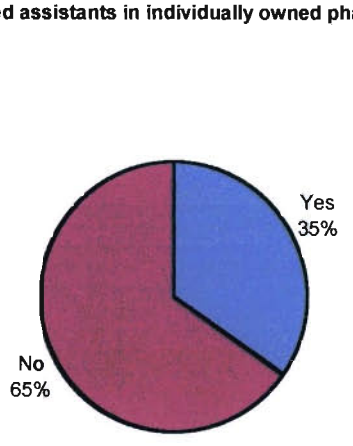

Figure 5 : Are any of your staff registered pharmacy or pharmacist assistants?

Table 10 indicates the provision of private consultation or counselling areas for patients in pharmacies. Majority of the pharmacists (88%) indicated that such an area was provided for patients in their pharmacy, while 12% of pharmacies did not provide such areas.

Table 10 : The Provision of Private Consultation or Counselling Areas

'24 Private consultation & counselling area provided for patients in the pharmacy

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	22	88.0	88.0	88.0
	No	3	12.0	12.0	100.0
	Total	25	100.0	100.0	

Figure 6 reflects that 9% of individually owned pharmacies did not provide private consultation and counselling areas for patients, and 91% of individually owned pharmacies did provide such areas.

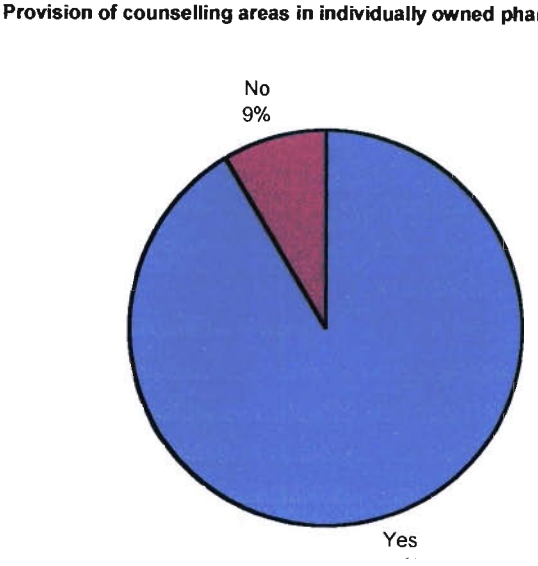

Figure 6 : The Provision of Private Consultation or Counselling Areas

Table 11 indicates that 40% of the pharmacies had in-store clinic facilities, while 60% did not.

Table 11 : The Provision of In-Store Clinic Facilities

P27 The pharmacy has in-store clinic facilities

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	10	40.0	40.0	40.0
	No	15	60.0	60.0	100.0
	Total	25	100.0	100.0	

Table 12 indicates that 56% of the pharmacies provide special services, e.g. blood pressure/glucose testing while 44% do not.

Table 12 : The Provision of Special Services, e.g. Blood Pressure/Glucose Testing

P28 Special services are provided, e.g. bp,glucose testing

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	14	56.0	56.0	56.0
	No	11	44.0	44.0	100.0
	Total	25	100.0	100.0	

4.2.2 Cross-Tabulations

The following cross-tabulations were analysed to assess any relationships between the variables.

Table 13 shows age and gender of the pharmacists.

Table 13 : Age of Pharmacist/Gender of Pharmacist Cross-tabulation

			P1 Gender of pharmacist		Total
			Male	Female	
P2 Age of Pharmacist	21-30	Count	3	3	6
		Total %	**12.0%**	**12.0%**	**24.0%**
	31-40	Count	7	5	12
		Total %	**28.0%**	**20.0%**	**48.0%**
	41-50	Count	4	1	5
		Total %	**16.0%**	**4.0%**	**20..0%**
	51-60	Count	2		2
		Total %	**8.0%**		**8.0%**
Total		Count	16	9	25
		Total %	**64.0%**	**36.0%**	**100.0%**

This is also represented in Figure 7.

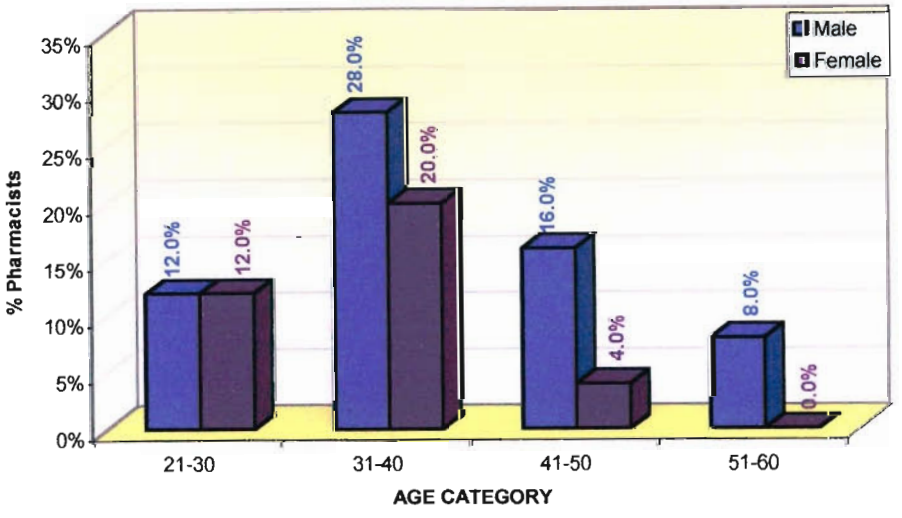

Figure 7 : Age/Gender of Pharmacist

From the above, it can be seen that of the majority of pharmacists (48%) in the '31-40' age group, 28% were males. The minority of pharmacists in the '51-60' category (8%) were all males.

Table 14 below analyses involvement of the pharmacist in formal CPD or CE courses by age. This is also reflected in Figure 8.

Table 14 : Age by formal CPD or CE Courses

			P5 Formal CPD or CE		Total
			Yes	No	
P2 Age of Pharmacist	21-30	Count	6		**6**
		Total %	**24.0%**		**24.0%**
	31-40	Count	12		**12**
		Total %	**48.0%**		**48.0%**
	41-50	Count	3	2	**5**
		Total %	**12.0%**	**8.0%**	**20..0%**
	51-60	Count		2	**2**
		Total %		**8.0%**	**8.0%**
Total		Count	21	4	**25**
		Total %	**84.0%**	**16.0%**	**100.0%**

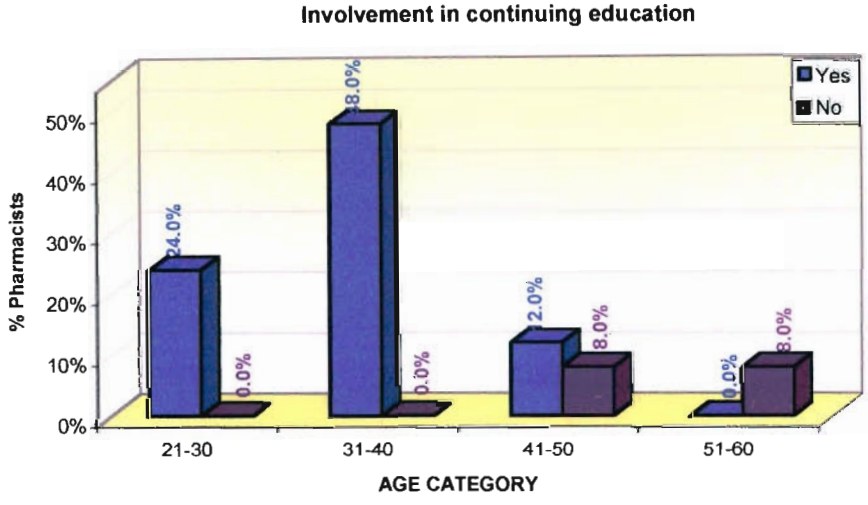

Figure 8 : Age by formal CPD or CE Courses

The above shows that of the 84% of pharmacists involved in formal CPD, 24% belonged to '21-30' category, majority (48%) belonged to '31-40' category and 12% to '41-50' category. Those that were not involved in formal CPD tended to fall in the older age groups, i.e. 8% in both the '41-50' and '51-60' category.

Table 15 indicates the recency of involvement of those pharmacists in CPD. This is also reflected in Figure 9.

Table 15 : Recency of Training by Involvement in CPD

			P5 Formal CPD or CE		Total
			Yes	No	
P6 Recency of Training	In the past year	Count	14		**14**
		Total %	**56.0%**		**56.0%**
	Within the past 2 years	Count	4		**4**
		Total %	**16.0%**		**16.0%**
	More than 2 years ago	Count	3		**3**
		Total %	**12.0%**		**12..0%**
	Not applicable	Count		4	**4**
		Total %		16%	**16.0%**
Total		Count	21	4	**25**
		Total %	**84.0%**	**16.0%**	**100.0%**

Figure 9 : Recency of Training by Involvement in CPD

From the above, it can be seen that of the 84% of pharmacists involved in formal CPD, 56% were involved in the past year, 16% within the past 2 years and 12% were involved more than 2 years ago.

Table 16 analyses pharmacists' attitude toward CPD by age. This is also reflected in Figure 10.

Table 16 : Pharmacists' Attitudes toward CPD by Age

Age of pharmacist * Attitude towards CPD programmes for pharmacists Crosstabulation

			Attitude towards CPD programmes for pharmacists			
			Very positive	Positive	Neutral	Total
Age of pharmacist	21-30	Count	2	4		6
		% of Total	8.0%	16.0%		24.0%
	31-40	Count	7	5		12
		% of Total	28.0%	20.0%		48.0%
	41-50	Count		5		5
		% of Total		20.0%		20.0%
	51-60	Count			2	2
		% of Total			8.0%	8.0%
Total		Count	9	14	2	25
		% of Total	36.0%	56.0%	8.0%	100.0%

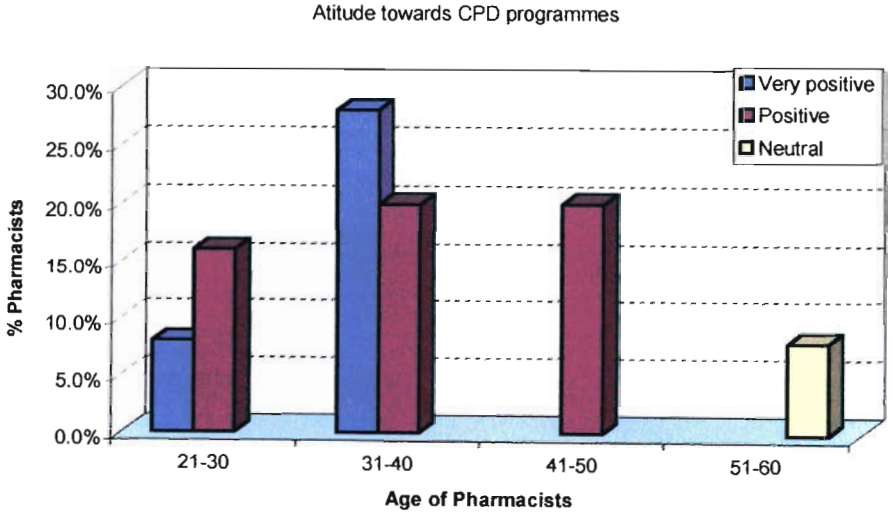

Figure 10 : Pharmacists' Attitudes toward CPD by Age

The above shows that of those pharmacists who were very positive about the implementation of formal CPD (36%), 28% belonged to the '31-40' category, of those who were positive (56%), 20% belonged to the '31-40'category and another 20% belonged to the '41-50' category while the minority of 8% who were neutral towards these programmes belonged to the '51-60' category.

4.2.3 Descriptive Statistics

The above statistics were calculated as an analysis for questions 8-20 of the pharmacist survey. For this section of the survey, a Likert type rating scale was employed. There were 13 Likert scale items. The following is a brief description of what each question was associated with. Involvement in:

8	-	Community related issues
9	-	Promotional activities
10	-	Informal continuing education
11	-	Staff education
12	-	In-house staff training
13	-	Incentive for staff motivation and teamwork
14	-	Continuing education for staff
15-20	-	The provision of pharmaceutical care.

Since there were 13 scale items, a system of scores was applied. The lowest possible score is 13x1 = 13 and the highest possible score is 13x5 = 65.

- Mean scores between 13 and 26 indicate "active" involvement of pharmacists in these activities and;
- Mean scores between 52 and 65 indicate "not so active" involvement of pharmacists in these activities.

Table 17 represents a summary of the descriptive statistics. The minimum, maximum, mean and standard deviation values have been calculated.

Table 17 : Descriptive Statistics for Pharmacist Survey (Q8-20)

	Q8-20	Valid N (listwise)
N	25	25
Minimum	15.00	
Maximum	31.00	
Mean	22.9600	
Std. Deviation	4.3825	

The mean score has been computed to be 22.960. Since this falls between 13 and 26, the data therefore suggest "active" involvement of pharmacists in these activities. The standard deviation has been calculated to be 4.3825. Although some pharmacists showed "active" involvement, for certain factors some pharmacists fell into the "not so active" category of involvement, i.e. either sometimes or seldom involved in these activities. Closer examination of these factors revealed that this was the case for the following factors:

Q8 - involvement in community related issues. As indicated by Table 5 before, 8% of the pharmacists are sometimes involved in such activities while majority (56%) were seldom involved.

Q9 - involvement in promotional activities. Table 6 showed that 20% of pharmacists were sometimes involved and a further 20% were seldom involved.

Q12 - In-house staff training. Table 8 previously indicated that 32% of pharmacists were seldom involved in in-house staff training.

4.2.4 Analysis of Open-ended Questions

- **Provision of in-house training**

Those pharmacists that were actively involved in in-house staff training described that these sessions were unstructured and informal and held on a weekly, ongoing basis. The importance of a two-way learning process was

stressed. Issues frequently discussed included product detailing, education and prescribing information on over-the-counter (OTC) medication, new product information and also developing communication, counselling and interpersonal skills. Magazines and journals were also provided during these sessions. If staff attended pharmaceutical company or wholesaler meetings, then sharing of knowledge gained through this way also formed part of these sessions. Many pharmacists went on to add that these sessions provided invaluable training to staff and positively impacted on the manner in which services were carried out.

- **Relationship with other members of the health care team**

Majority of the pharmacists described this type of relationship as being pleasant and understanding, good to excellent, cordial and very professional. All the pharmacists indicated that they had no difficulty in making contact with other health care professionals if there was a need to do so, e.g. contacting a prescribing doctor to query a prescription. Most pharmacists indicated that they were easily able to liaise with them with respect to health care issues and drug therapy and stressed that this kind of relationship is essential in forming a framework for a collaborative approach between all members to achieve an optimal management strategy for the patient.

- **Involvement in community related issues and promotional activities.**

Those pharmacists who were actively involved in these issues described their involvement as holding drug awareness campaigns, and giving talks in schools and clinics. The emphasis of awareness seemed to be mostly on HIV and drug or alcohol abuse related issues.

Some pharmacists held in-store promotional activities to create awareness on an ongoing basis. Some created this awareness mostly during Pharmacy Week, e.g. expiry date checks where patients were given brown paper bags and asked to bring in old, expired medication and then advised on correct disposal methods. Awareness was also created by placing of posters in the pharmacy and handing out pamphlets to customers. Some pharmacists offered

free screening tests during this week, e.g. blood pressure/sugar/ cholesterol testing.

- **Important factors in the provision of pharmaceutical care to patients**

All pharmacists indicated that they were always or often involved in the provision of pharmaceutical care to patients. Other important factors that were brought to light by the pharmacists included:

- Descheduling of certain medicines, e.g. from S3 or S4 to S1 and S2. Those pharmacists that listed this factor thought that this move could give pharmacists more power in providing an effective and cost-efficient health care service, reason being that the pharmacist is an expert on drug therapy and the pharmacist's knowledge in this regard is most superior to other health care professionals.

- Good communication and counselling skills remains very much a part of the pharmacist's professional duty.

- One outlet system should be in place, i.e. patients should try as far as possible to frequent one set doctor and pharmacy. No "shopping" around could also serve to be cost effective and curb against abuse.

- Many pharmacists indicated that although there is a move to providing optimal pharmaceutical care to patients, the time factor still remained very much an issue. Majority (44%) of the pharmacists indicated that the percentage of prescription vs front shop business was 60:40, while another 32% indicated a percentage of 80:20.

- Although 68% of the pharmacists indicated that the level of pharmaceutical care provided to patients would not change if professional remuneration fees for these services were introduced, 32% felt that it would change. Some also expressed strong views of dispensing doctors "going out of the window".

- The introduction of clinic facilities or at least the provision of special services was also stressed.

- **Important factors in maintaining the professional image of the pharmacy profession**

- Personal contact and service to patients, keeping the personal 'touch' alive.
- Honesty and integrity
- Professional expertise and knowledge: majority of the pharmacists were involved in informal CE. Many pharmacists felt that improving knowledge and expertise through formal CPD and CE was very necessary but also felt that some of the CE courses were not 'good enough'. Many also felt that staff needed continuing education courses and training since the customer's first contact is with the assistant and therefore their impression of the service encounter with the assistant is of utmost importance.
- Ethical behaviour, e.g. measures should be taken to curb against medical aid fraud.
- Keeping updated with the latest in technological advancements.
- Introducing a mission statement for the pharmacy.
- Neatness, cleanliness and hygiene.

Further findings from the analysis of the pharmacist survey revealed that all pharmacists complied with GPP standards, majority (56%) provided an after hours emergency service, e.g. cellphone number, 92% provided delivery services and pharmacy trading hours included both Sundays and Public Holidays in 84% of the pharmacies.

4.3 DATA ANALYSIS AND FINDINGS : CUSTOMER SURVEY

The survey amongst customers was carried out in an attempt to evaluate customer perceptions of the quality of services provided to them in retail

community pharmacies. Thus, the findings here will give some indication as to whether customers are satisfied or not with the quality of services they receive.

4.3.1 Frequencies

No of Respondents (n) = 75.

Table 18 below depicts the sample demographics by gender.

Table 18: Gender of the Respondents

C1 Gender

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	28	37.3	37.3	37.3
	Female	47	62.7	62.7	100.0
	Total	**75**	**100.0**	**100.0**	

As can be seen from Table 18, 37.3% of the respondents were males and 62.7% were females.

As depicted by Table 19, 25.3% belonged to the '18-25' age group, majority (32%) belonged to the '26-35' category, 21.3% were in the '36-45' group, 16% in the '46-55' group and a minority (5.3%) were over 56.

Table 19 : Age of the Respondents

C2 Age

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	18-25	19	25.3	25.3	25.3
	26-35	24	32.0	32.0	57.3
	36-45	16	21.3	21.3	78.7
	46-55	12	16.0	16.0	94.7
	Over 56	4	5.3	5.3	100.0
	Total	**75**	**100.0**	**100.0**	

Table 20 classifies the respondents according to medical aid or private (cash) patients. In this study, 46.7% of the customers were medical aid patients and 53.3% were private patients.

Table 20 : Medical Aid Patients and Private (Cash) Patients

C3

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Medical Aid Patient	35	46.7	46.7	46.7
	Private (Cash) Patient	40	53.3	53.3	100.0
	Total	**75**	**100.0**	**100.0**	

Table 21 categorises the customers as 'regular' and 'not regular' customers. 48% of customers were 'regular' while 52% were 'not regular' customers.

Table 21 : Regular and Not Regular Customers

C4

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Regular Customer (frequent visits to pharmacy -repeat custom	36	48.0	48.0	48.0
	Not a regular customer (seldom visits to pharmacy)	39	52.0	52.0	100.0
	Total	**75**	**100.0**	**100.0**	

In Table 22 it can be seen that 36% of the respondents frequented one set pharmacy, 17.3% frequented more than one pharmacy while majority (46.7%) had one set pharmacy but will visit another if their regular pharmacy was unable to provide the services.

Table 22 : One set pharmacy, more than one pharmacy, will visit another if regular pharmacy cannot provide the services

C5

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	One set pharmacy that you frequent	27	36.0	36.0	36.0
	More than one pharmacy	13	17.3	17.3	53.3
	One set pharmacy but will visit another if your regular phar	35	46.7	46.7	100.0
	Total	**75**	**100.0**	**100.0**	

The following data relate to Section B of the customer survey (service encounters with the pharmacist). Table 23 indicates that although most customers tended to agree that the pharmacist identifies him or her by name, 16% disagreed and a further 8% strongly disagreed with this factor. This is also represented in Figure 11.

Table 23 : The Pharmacist identifies me by name

C9 The pharmacist identifies me by name

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly agree	33	44.0	44.0	44.0
	Agree	20	26.7	26.7	70.7
	Unsure	4	5.3	5.3	76.0
	Disagree	12	16.0	16.0	92.0
	Strongly disagree	6	8.0	8.0	100.0
	Total	**75**	**100.0**	**100.0**	

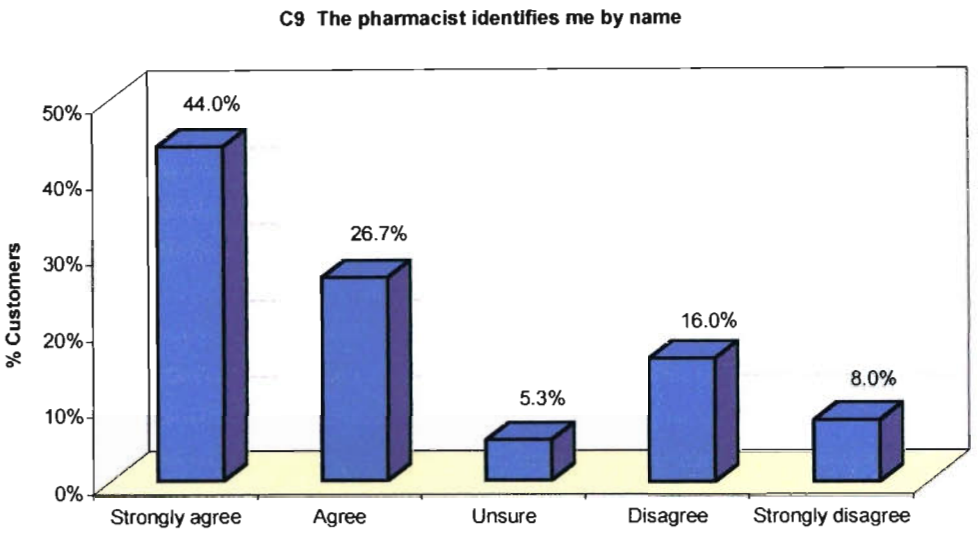

Figure 11 : The Pharmacist identifies me by name

In Table 24, it can be seen that although most customers agreed that a suitable private counselling area was provided in the pharmacy, a high percentage (29.3%) were unsure and 12% disagreed with this factor.

Table 24 : The provision of a suitable private counselling area in the pharmacy

C12 If I require privacy with the pharmacist, there is a suitable private counselling area in the pharmacy

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly agree	16	21.3	21.3	21.3
	Agree	24	32.0	32.0	53.3
	Unsure	22	29.3	29.3	82.7
	Disagree	9	12.0	12.0	94.7
	Strongly disagree	4	5.3	5.3	100.0
	Total	**75**	**100.0**	**100.0**	

Table 25 reflects that although most customers felt that medical terms were clearly explained to them, 13.3% disagreed and 5.3% strongly disagreed with this factor.

Table 25 : Medical terms are clearly explained to me

C15 Medical terms are clearly explained to me

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly agree	26	34.7	34.7	34.7
	Agree	32	42.7	42.7	77.3
	Unsure	3	4.0	4.0	81.3
	Disagree	10	13.3	13.3	94.7
	Strongly disagree	4	5.3	5.3	100.0
	Total	**75**	**100.0**	**100.0**	

This is also reflected in Figure 12.

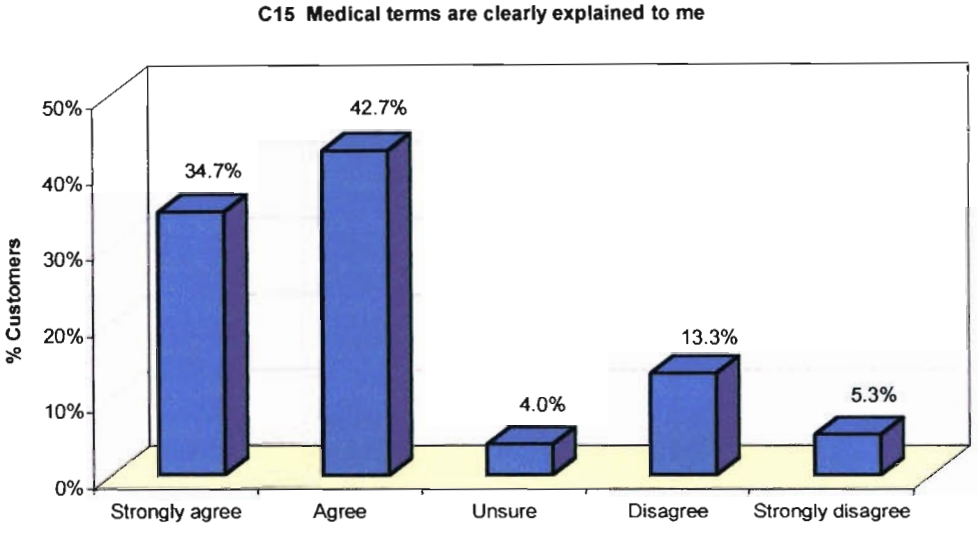

Figure 12 : Medical terms are clearly explained to me

Table 26 shows that although majority of the pharmacists tended to agree that additional information was supplied to them when receiving medication, 17.3% were unsure and 14.7% of customers disagreed with this factor.

Table 26 : The provision of additional information when receiving medication

C16 Additional information is supplied to me when I receive medication (e.g. pamphlets or computer printouts)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly agree	19	25.3	25.3	25.3
	Agree	28	37.3	37.3	62.7
	Unsure	13	17.3	17.3	80.0
	Disagree	11	14.7	14.7	94.7
	Strongly disagree	4	5.3	5.3	100.0
	Total	**75**	**100.0**	**100.0**	

Figure 13 also clearly reflects this.

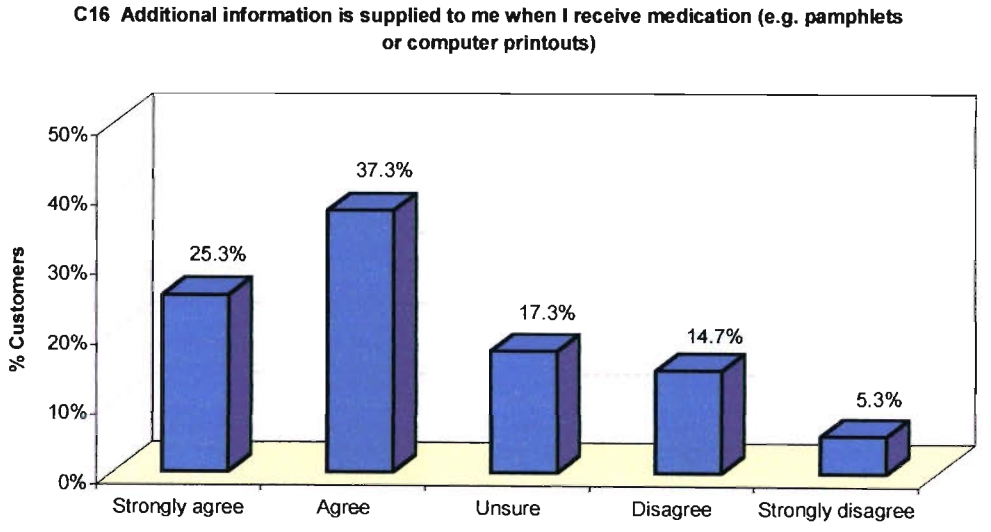

Figure 13 : The provision of additional information when receiving medication

Tables 27 and 28 show that although most customers tended to be in agreement with the respective factors, a high percentage were either unsure or disagreed with those factors.

Table 27 : The pharmacist monitors and evaluates my condition efficiently

C18 The pharmacist monitors and evaluations my conditions efficiently

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly agree	8	10.7	10.7	10.7
	Agree	32	42.7	42.7	53.3
	Unsure	18	24.0	24.0	77.3
	Disagree	13	17.3	17.3	94.7
	Strongly disagree	4	5.3	5.3	100.0
	Total	**75**	**100.0**	**100.0**	

24% were unsure and 17.3% disagreed with this factor (Figure 14).

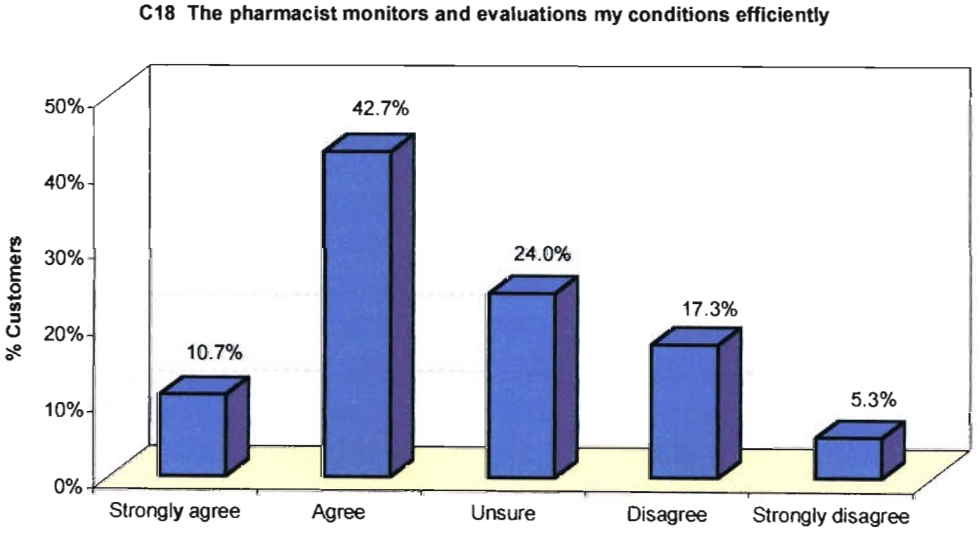

Figure 14 : The pharmacist monitors and evaluates my condition efficiently

Table 28 : I do not have a long waiting time to receive service

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Strongly agree	**11**	**14.7**	**14.7**	**14.7**
Agree	**37**	**49.3**	**49.3**	**64.0**
Unsure	**8**	**10.7**	**10.7**	**74.7**
Disagree	**17**	**22.7**	**22.7**	**97.4**
Strongly disagree	**2**	**2.7**	**2.7**	**100.0**
Total	75	100.0	100.0	100.0

22.7% disagreed with this factor (Figure 15).

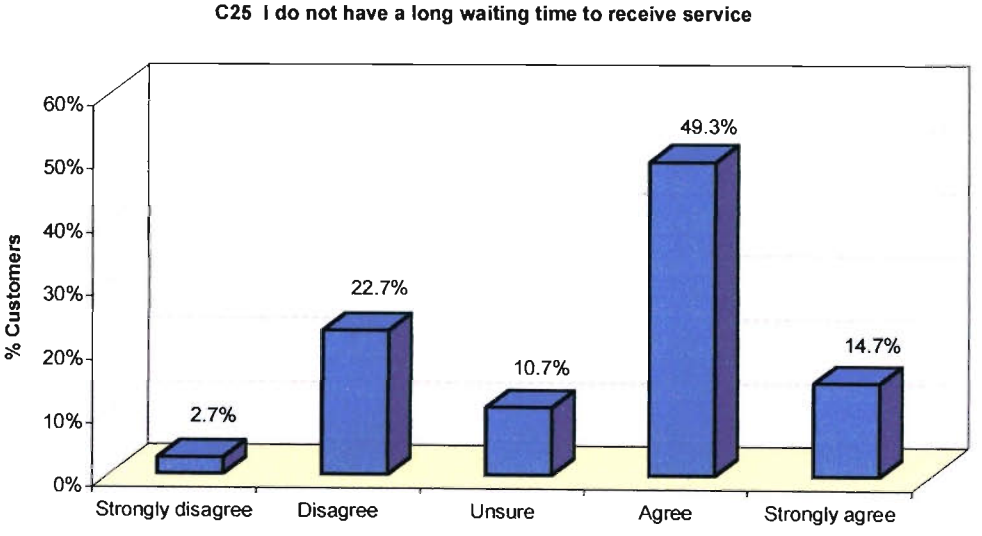

Figure 15 : I do not have a long waiting time to receive service

In Table 29 it can be seen that 30.7% of customers strongly agreed that they were pleased with the manner in which a pharmacist performs his/her services, 57.3% agreed while 5.3% were unsure and 6.7% disagreed with this factor.

Table 29 : I am pleased with the manner in which a pharmacist performs his/her services

C26 I am pleased with the manner in which a pharmacist performs his/her services

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly agree	23	30.7	30.7	30.7
	Agree	43	57.3	57.3	88.0
	Unsure	4	5.3	5.3	93.3
	Disagree	5	6.7	6.7	100.0
	Total	**75**	**100.0**	**100.0**	

This is also represented in Figure 16.

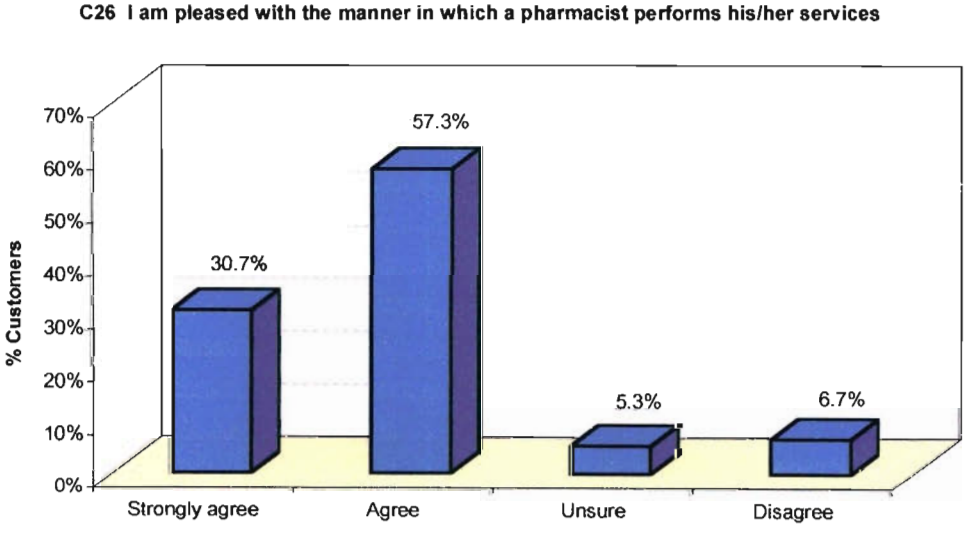

Figure 16 : I am pleased with the manner in which a pharmacist performs his/her services

The frequencies of the above-mentioned factors related to Section B were highlighted here for further discussion under Descriptive Statistics.

The following data relate to Section C (service encounters with pharmacy employees). The relevance of this analysis will be taken further under Descriptive Statistics.

Table 30 : Pharmacy staff are properly trained and have the necessary knowledge to assist me

C31 Pharmacy staff are properly trained and have the necessary knowledge to assist me

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly agree	21	28.0	28.0	28.0
	Agree	29	38.7	38.7	66.7
	Unsure	21	28.0	28.0	94.7
	Disagree	3	4.0	4.0	98.7
	Strongly disagree	1	1.3	1.3	100.0
	Total	**75**	**100.0**	**100.0**	

As shown above, majority of the customers agreed (38.7%) or strongly agreed (28%) with this factor. A high percentage of customers were unsure (28%), while 4% disagreed and 1.3% strongly disagreed.

Table 31 indicates that although most customers felt that they did not have a long waiting time to receive service from pharmacy staff, 16% disagreed and 9.3% strongly disagreed with this factor.

Table 31 : I do not have a long waiting time to receive service from employees

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	**Strongly agree**	12	16	16	**16**
	Agree	40	53.3	53.3	**69.3**
	Unsure	4	5.3	5.3	**74.6**
	Disagree	12	16	16	**90.6**
	Strongly disagree	7	9.3	9.3	**99.9**
	Total	**75**	**100.0**	**100.0**	100.0

This can also be seen in Figure 17.

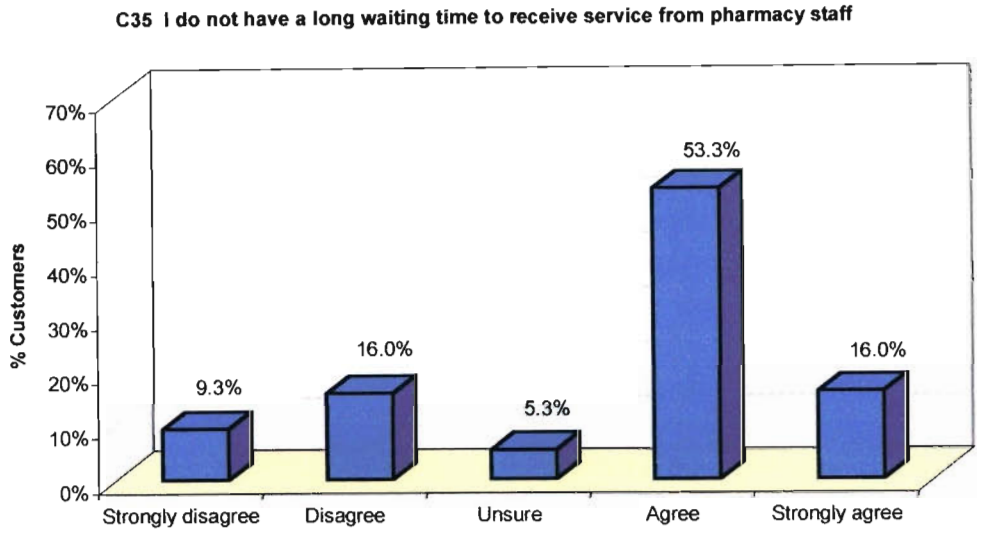

Figure 17 : I do not have a long waiting time to receive service from employees

The following relate to Section D (evidence of service) and Section E (general) of the customer survey.

Table 32 refers to availability of an emergency after hours service. 21.3% strongly agreed and 24% agreed that this service was available while 25.3% were unsure, 14.7% disagreed and another 14.7% strongly disagreed with this factor.

Table 32 : Availability of an after hours service

C44 The pharmacy offers an emergency after hours service (e.g. after hours telephone number is available)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly agree	16	21.3	21.3	21.3
	Agree	18	24.0	24.0	45.3
	Unsure	19	25.3	25.3	70.7
	Disagree	11	14.7	14.7	85.3
	Strongly disagree	11	14.7	14.7	100.0
	Total	**75**	**100.0**	**100.0**	

This is also reflected in Figure 18.

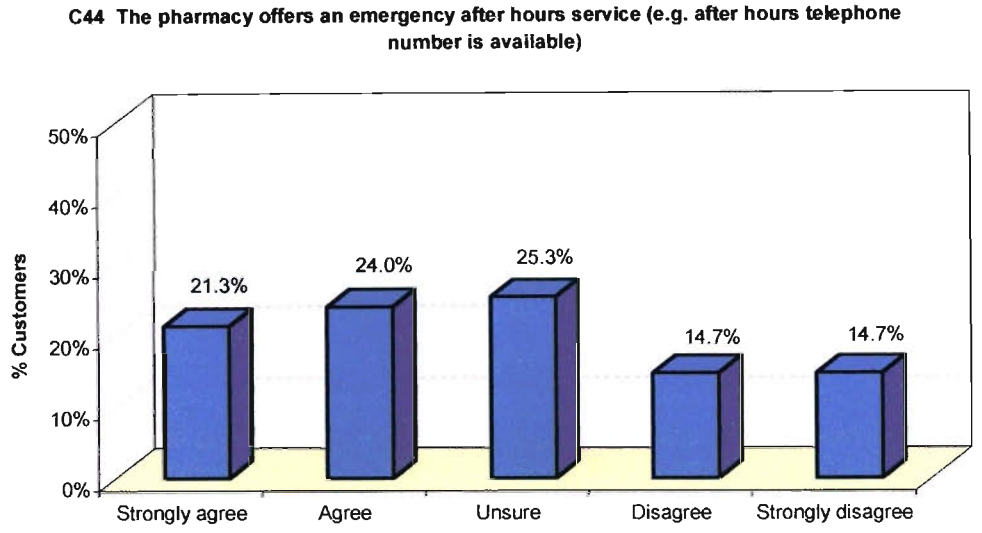

Figure 18 : Availability of an after hours service

In Table 33, although majority of customers agreed that ample parking space was available, 28% disagreed and 6.7% strongly disagreed with this factor.

Table 33 : There is ample parking space available to me

C46 There is ample parking space available to me

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly agree	19	25.3	25.3	25.3
	Agree	26	34.7	34.7	60.0
	Unsure	4	5.3	5.3	65.3
	Disagree	21	28.0	28.0	93.3
	Strongly disagree	5	6.7	6.7	100.0
	Total	**75**	**100.0**	**100.0**	

See Figure 19.

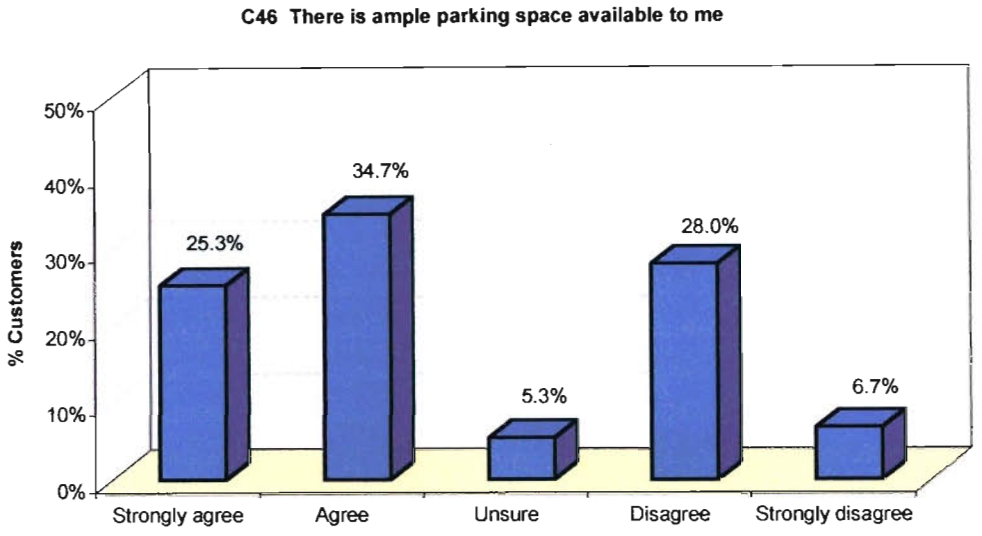

Figure 19 : There is ample parking space available to me

Table 34 shows that majority of customers (33.3%) strongly agreed that special services were available to them, 32% agreed while 21.3% were unsure, 8% disagreed and 5.3% strongly disagreed with this factor.

Table 34 : Availability of special services at the pharmacy

C47 Special services are available at the pharmacy (e.g. blood pressure/glucose/cholestrol testing, clinics, etc)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly agree	25	33.3	33.3	33.3
	Agree	24	32.0	32.0	65.3
	Unsure	16	21.3	21.3	86.7
	Disagree	6	8.0	8.0	94.7
	Strongly disagree	4	5.3	5.3	100.0
	Total	**75**	**100.0**	**100.0**	

See Figure 20.

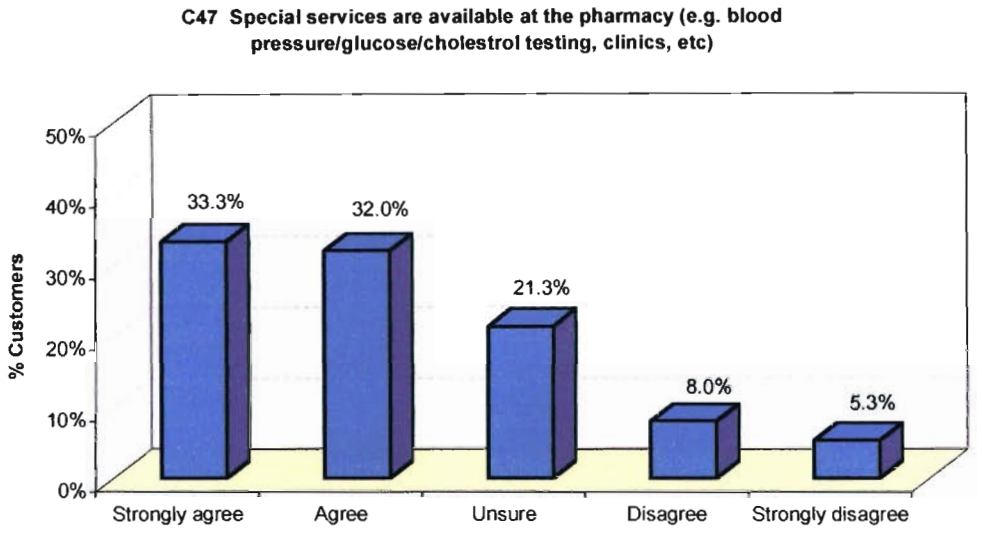

Figure 20 : Availability of special services at the pharmacy

In Table 35, 61.3% of customers indicated that they find or would find these services very useful, 30.7% agreed while 5.3% were unsure and 2.7% disagreed with this factor.

Table 35 : Usefulness of special services in a pharmacy setting

C48 I find/would find these services very useful in a pharmacy setting

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly agree	46	61.3	61.3	61.3
	Agree	23	30.7	30.7	92.0
	Unsure	4	5.3	5.3	97.3
	Disagree	2	2.7	2.7	100.0
	Total	**75**	**100.0**	**100.0**	

See Figure 21.

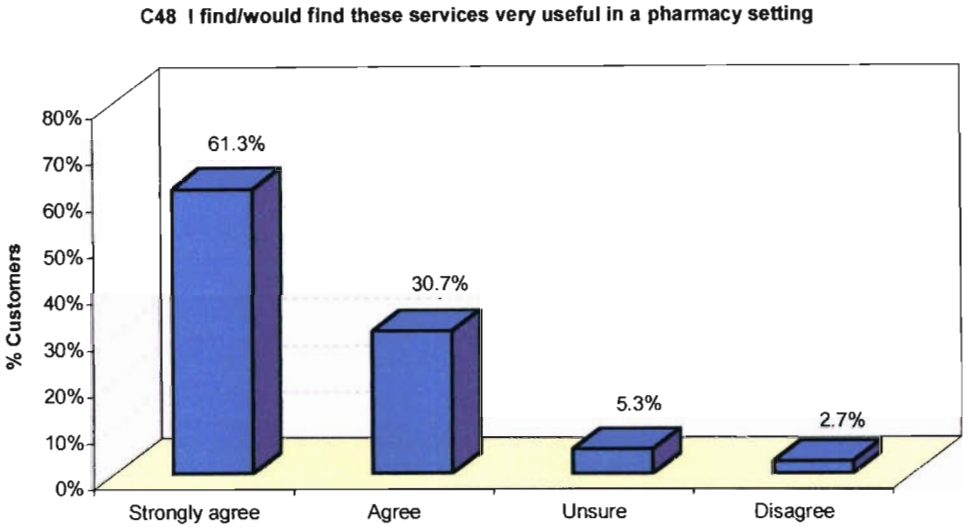

Figure 21 : Usefulness of special services in a pharmacy setting

The following represents a rating of the overall quality of services provided to customers in community pharmacies they frequent.

Table 36 : Overall quality of customer services

C49 Overall quality of customer services

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Poor	2	2.7	2.7	2.7
	Fair	3	4.0	4.0	6.7
	Good	36	48.0	48.0	54.7
	Excellent	29	38.7	38.7	93.3
	Exceeds Excellence	5	6.7	6.7	100.0
	Total	**75**	**100.0**	**100.0**	

Majority (48%) of customers rated overall quality of services as good, 38.7% rated service as excellent and 6.7% rated it as exceeds excellence. 4% rated services as fair and 2.7% rated it as poor.

See Figure 22.

Figure 22 : Overall quality of customer services

4.3.2 Cross-Tabulations

The following cross-tabulations were analysed to assess or inspect any relationships between the variables.

Table 37 shows age by gender of the respondents.

Table 37 : Age/Gender of the Respondents

			C2 Age					Total
			18-25	**26-35**	**36-45**	**46-55**	**Over 56**	
C1 Gender	**Male**	**Count**	**3**	**9**	**6**	**7**	**3**	28
		Total %	4.0%	12.0%	8.0%	9.3%	4.0%	37.3%
	Female	**Count**	**16**	**15**	**10**	**5**	**1**	47
		Total %	21.3%	20.0%	**13.3%**	6.7%	1.3%	62.7%
Total		**Count**	**19**	**24**	**16**	**12**	**4**	75
		Total %	25.3%	32.0%	21.3%	16.0%	5.3%	100.0%

From the table it can be seen that of the majority of customers (32%) in the '26-35' age group, most were females (20%). In the '18-25' group, 21.3% were females and 4% males. In the '36-45' group, most (13.3%) were females and 8% were males. In the older age groups, most were males: 9.3% males and 6.7% females in the '46-55' group and 4% males, 1.3% females in the 'over 56' group.

See Figure 23.

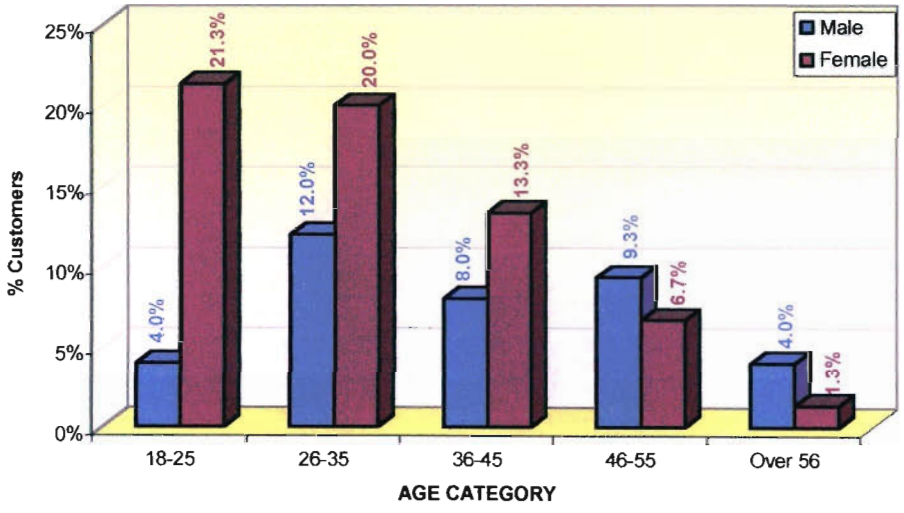

Figure 23 : Age/Gender of the Respondent

Cross-tabulations were then carried out for overall quality of customer services with:

- Medical Aid/Private (Cash) Patients
- Regular/Not Regular Customers
- One set pharmacy/more than one/will visit another

Table 38 : Overall quality of customer services by medical aid patients and private patients

Crosstab

			C3		
			Medical Aid Patient	Private (Cash) Patient	**Total**
C49 Overall quality of customer services	Poor	Count		2	**2**
		Total %		**2.7%**	**2.7%**
	Fair	Count	1	2	**3**
		Total %	**1.3%**	**2.7%**	**4.0%**
	Good	Count	13	23	**36**
		Total %	**17.3%**	**30.7%**	**48.0%**
	Excellent	Count	17	12	**29**
		Total %	**22.7%**	**16.0%**	**38.7%**
	Exceeds Excellence	Count	4	1	**5**
		Total %	**5.3%**	**1.3%**	**6.7%**
Total		Count	**35**	**40**	**75**
		Total %	**46.7%**	**53.3%**	**100.0%**

Table 38 shows that the majority of medical aid patients (22.7%) rated services as excellent while the majority of private (cash) patients (30.7%) rated services as good. This could mean that the possibility of difference in treatment towards medical aid patients and cash patients in retail community pharmacy may exist.

Table 39 : Overall quality of customer services by regular/not regular customers

Crosstab

			C4		
			Regular Customer (frequent visits to pharmacy -repeat custom	Not a regular customer (seldom visits to pharmacy)	**Total**
C49 Overall quality of customer services	Poor	Count	1	1	**2**
		Total %	**1.3%**	**1.3%**	**2.7%**
	Fair	Count	1	2	**3**
		Total %	**1.3%**	**2.7%**	**4.0%**
	Good	Count	16	20	**36**
		Total %	**21.3%**	**26.7%**	**48.0%**
	Excellent	Count	15	14	**29**
		Total %	**20.0%**	**18.7%**	**38.7%**
	Exceeds Excellence	Count	3	2	**5**
		Total %	**4.0%**	**2.7%**	**6.7%**
Total		Count	**36**	**39**	**75**
		Total %	**48.0%**	**52.0%**	**100.0%**

The results show that majority of the 'regular' customers (21.3%) rated services as good and majority of the 'not regular' customers (26.7%) also rated services as good.

This is also reflected in Figure 24.

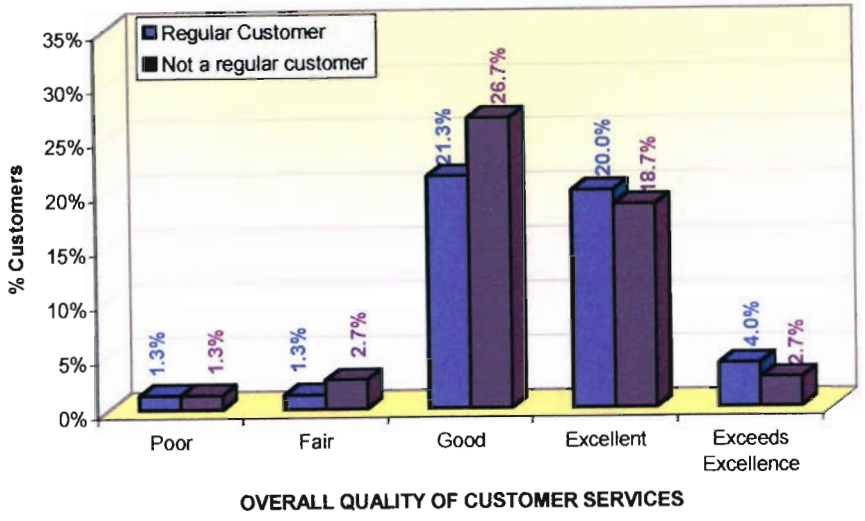

Figure 24 : Overall quality of customer services by regular/not regular customers

Table 40 : Overall quality of services by one set pharmacy, more than one set pharmacy, will visit another if regular pharmacy cannot provide the services

Crosstab

			C5			
			One set pharmacy that you frequent	More than one pharmacy	One set pharmacy but will visit another if your regular phar	**Total**
C49 Overall quality of customer services	Poor	Count			2	**2**
		Total %			**2.7%**	**2.7%**
	Fair	Count	1		2	**3**
		Total %	**1.3%**		**2.7%**	**4.0%**
	Good	Count	11	9	16	**36**
		Total %	**14.7%**	**12.0%**	**21.3%**	**48.0%**
	Excellent	Count	11	4	14	**29**
		Total %	**14.7%**	**5.3%**	**18.7%**	**38.7%**
	Exceeds Excellence	Count	4		1	**5**
		Total %	**5.3%**		**1.3%**	**6.7%**
Total		Count	**27**	**13**	**35**	**75**
		Total %	**36.0%**	**17.3%**	**46.7%**	**100.0%**

The data show that for those customers who had one set pharmacy, majority (14.7%) rated services as good and another 14.7% rated them as excellent. This is expected for those customers who are comfortable and satisfied with one set pharmacy. In other words, this factor (quality of services) may be the reason why they choose one pharmacy.

For those customers who frequented more than one pharmacy, majority (12%) rated services as good and 5.3% rated them as excellent.

For those customers who had one set pharmacy but will visit another if their pharmacy could not provide the services, majority (21.3%) rated services as good, 18.7% rated them as excellent and 1.3% as exceeds excellence. 2.7% rated services as fair and another 2.7% rated them as poor. This is also expected since customers may feel they do not receive the same standard or quality of services as they would in their set pharmacy.

Overall, majority of customers rated services as good to excellent as shown previously in Table 36 and Figure 22.

4.3.3 Descriptive Statistics

These statistics were calculated as an analysis for Sections B, C and D of the customer survey. For these sections of the survey, a Likert type rating scale was employed.

Section B (Q6-26) - This section dealt with service encounters with the pharmacist.

Section C (Q27-37) - This section dealt with service encounters with pharmacy employees.

Section D (Q38-48) - This section dealt with evidence of service.

A system of scores was applied to each section. For Section B, there were 21 scale items. The lowest possible score is 21 x 1 = 21 and the highest possible score is 21 x 5 = 105.

- Mean scores between 21 and 42 indicate respondents agreed to all questions in this section, in other words, a favourable service encounter with the pharmacist.
- Mean scores between 84 and 105 indicate tendency to disagree, implying a negative service encounter.

Similarly, for Sections C and D there were 11 items. The lowest possible score is 11 x 1 = 11 and the highest possible score is 11 x 5 = 55.

- Mean scores between 11 and 22 indicate a favourable encounter with pharmacy employees (for Section C) and a positive perception of the evidence of service (for Section D).
- Mean scores between 44 and 55 indicate the opposite.

Table 41 represents a summary of the descriptive statistics. The minimum, maximum, mean and standard deviation values have been calculated.

Table 41 : Descriptive Statistics for Customer Survey (Sections B, C, D)

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
B Service encounters with pharmacist	75	23	80	43.93	12.59
C_ Service encounters with pharmacy employees	75	11	34	22.23	5.40
D Evidence of service	75	11	34	21.09	5.58
Valid N (listwise)	75				

The mean score has been computed to be 43.93 for Section B. This value is slightly above 42. It indicates that most respondents tended to agree with factors in Section B, but at the same time, there were respondents who tended to be unsure or disagree with certain factors. Closer examination of these factors revealed that this was the case for the following. (These factors have been mentioned previously under 4.3.1 Frequencies):

Q9 - The pharmacist identifies me by name. 16% disagreed and 8% strongly disagreed with this factor. Identifying a customer by name clearly creates an environment of warmth, friendliness and familiarity. It places the customer at ease and can positively impact on how the customer or patient perceives the quality of that entire service delivery process.

Q12 - The provision of a suitable private counselling area in the pharmacy. As Table 24 indicated previously, 29.3% were unsure and 12% disagreed

with this factor.

Q15 - Medical terms are clearly explained to me (Table 25).

Q16 - Additional information is supplied to me when I receive medication (Table 26).

Q18 - The pharmacist monitors and evaluates my condition efficiently (Table 27).

Q25 - I do not have a long waiting time to receive service from the pharmacist (Table 28).

Although some respondents tended to disagree mostly with respect to the above-mentioned factors (resulting in a value slightly higher than 42), overall, for Section B, customers indicated a favourable response, i.e. most respondents were in agreement with all the factors, implying a moderate to high standard of quality of services provided to them by pharmacists in retail community pharmacies.

For Section C, the mean score has been computed to be 22.23. Once again, this value is only slightly above 22 implying that most respondents were in agreement with all the factors in this section, i.e. a favourable service encounter with pharmacy employees.

Factors that could have resulted in the score being just above 22, i.e. where respondents were unsure or tended to disagree include:

Q31 - Pharmacy staff are properly trained and have the necessary knowledge to assist me. As Table 30 previously showed, 28% of respondents were unsure about this factor. The evidence of staff being trained and being knowledgeable in a pharmacy setting would come through in the services they provide to customers, e.g. product knowledge, advice, ability to solve customers problems. Although most respondents strongly agreed (28%) or agreed (38.7%) with this factor, the high percentage of 28% of respondents who were unsure about it, necessitates closer examination of this factor.

Q35 - I do not have a long waiting time to receive service from employees. Although most respondents were in agreement with this (16% strongly agreed and 53.3% agreed), 16% of respondents disagreed.

For Section D, the mean score was computed to be 21.09. This indicates a favourable response to the evidence of service.

Further findings in Section D indicate that a high percentage (25.3%) of respondents were unsure about the availability of an after hours service while 14.7% disagreed and a further 14.7% strongly disagreed that such a service was available (Table 32). Availability of parking space was the other factor where respondents (28%) showed some disagreement (Table 33). 21.3% of respondents were unsure whether special services were provided while 61.3% strongly agreed that these services would be very useful in a pharmacy setting (Tables 34 and 35).

4.3.4 Correlations

A correlational analysis was carried out using Pearson's correlation coefficient r to test whether a linear relationship existed between service encounters with the pharmacist and those with employees. This coefficient varies over a range of +1 through 0 to –1 (Cooper and Schindler, 1998). The –ve sign indicates an inverse relationship and the +ve sign indicates a direct relationship.
r values of 0.7 and above indicate a strong correlation;
r values of 0.5 – 0.7 indicate a moderate correlation; and
r values of below 0.5 indicate a low correlation.

The r values and p-values have been computed and summarised in Table 42.

Table 42 : Correlational Analysis for Service Encounters with Pharmacist and Employees

Correlations

		B Service encounters with pharmacist	C_ Service encounters with pharmacy employees	D Evidence of service
B Service encounters with pharmacist	Pearson Correlation	1.000	.638**	.384**
	Sig. (2-tailed)	.	.000	.001
	N	75	75	75
C_ Service encounters with pharmacy employees	Pearson Correlation	.638**	1.000	.563**
	Sig. (2-tailed)	.000	.	.000
	N	75	75	75
D Evidence of service	Pearson Correlation	.384**	.563**	1.000
	Sig. (2-tailed)	.001	.000	.
	N	75	75	75

**. Correlation is significant at the 0.01 level (2-tailed).

From the table it can be seen that the p-values for Sections B and C are 0,000. p-values = 0.000 signify a significant correlation between factors. This means that a significant correlation does exist between the factors.

r values have been computed to be 0.638. since the value is positive and between 0.5 – 0.7, this indicates a direct relationship with moderate correlation between the factors.

In other words, customers who have favourable service encounters with the pharmacist also have favourable service encounters with employees.

5.3.5 t-Tests

The t-test is a parametric test used for independent samples (Cooper and Schindler, 1998). It is used to test differences in means for two groups.

3 t-tests were carried out.

1. To test whether any gender differences existed with respect to the factors (in Sections B, C, D).

2. To test whether any differences existed between medical aid and cash patients with respect to the above-mentioned factors.
3. To test whether any differences existed between 'regular' and 'not regular' customers with respect to the above-mentioned factors.

p-values obtained for these tests indicate significance if $p \leq 0.05$.

Results for these tests are detailed and attached as Appendix D.

For t-test 1, p-values were all > 0.05 indicating no gender differences with respect to the factors.

For t-test 2, the p-value for Section C was calculated to be 0.048. since it is < 0.05, this indicates a significant difference with respect to Section C. In other words, medical aid patients have more favourable service encounters with pharmacy employees than cash patients.

For t-test 3, the p-value for Section B was calculated to be 0.05. This indicates a significant difference with respect to Section B. In other words, regular customers have more favourable service encounters with the pharmacist than those customers who are not regular.

4.3.6 Oneway ANOVA with Age

This analysis of variance compares the means of several groups (Cooper and Schindler, 1998). It was carried out to establish whether any significant differences existed between the age groups of customers with respect to factors in Sections B, C and D.

Results are detailed and also attached as Appendix D.

Since all p-values obtained are > 0.05, no significant differences between the age groups exist with respect to the above-mentioned factors.

4.3.7 Analysis of Open-Ended Questions

- Important reasons listed by customers for frequenting the pharmacy of their choice.
  - Convenient location and easy access. Some customers mentioned that their pharmacy was close to their doctor's rooms.
  - Reliability of service and efficient customer service.
  - Friendly staff, warm and welcoming environment
  - Reasonable trading hours
  - They are familiar with their pharmacist and have a good relationship.
  - Pharmacist is approachable and easy to talk to. Family medical history and records are well documented by pharmacy. They are well known, liked and treated with respect by the team of workers.
  - Good delivery services offered.
  - Pharmacy accepts their medical aid.

- Difficulties listed by customers when visiting a pharmacy:
  - Parking space was a problem for most customers.
  - Some customers complained of early closing times and pharmacies not being open on Sundays.
  - Long waiting times to receive service/long queues.
  - Some customers complained that sometimes medicines or stock were not always readily available – 'out of stock' situations or late deliveries from pharmacy wholesalers contributed to this problem, resulting in customers being made to wait for stock.
  - Some customers felt that staff were not always friendly and eager to serve them. At times, staff have been rude, abrupt and arrogant. Sometimes staff are preoccupied or busy with private telephone calls keeping the customer waiting to receive service.
  - Sometimes if the pharmacist is busy, a trained assistant is not always available.
  - Congestion in pharmacies.

- Recommendations by customers to improve overall quality of services in retail pharmacies:
  - The pharmacist must be available at all times. Be more customer and service orientated rather profit orientated.
  - Provide a hands on advice/counselling facility, spend more time discussing side effects and other relevant information, e.g. explaining dosages.
  - Create more awareness in the pharmacy and community. More advertising and in-store promotions, presenting informative talks in the pharmacy, e.g. on certain common ailments and diseases, first aid, diets, diabetes, asthma. (Patient education)
  - Staff training and education to improve product knowledge as well as to develop communication and interpersonal skills. They should be more attentive, show genuine interest in the customer and be prepared to listen. Staff should smile more, not be short-tempered and should not ignore the customer.
  - Provide special services for a nominal charge.
  - Introduce in-store clinic facilities.
  - Cut down waiting times by faster service or having more staff available.
  - Respect the need for privacy and make provision for private counselling areas.
  - Improve parking space.
  - Introduce more specials, discounts, e.g. cash discounts.
  - Improve store layout by creating more space between aisles.

4.4 SUMMARY

The findings of the pharmacist survey revealed the following:

In terms of formal CPD involvement, majority of the pharmacists (84%) were involved in CPD at some stage. Most were involved in the past year (56%), 16% within the past 2 years and 12% more than 2 years ago. Those that were

not involved at all and who were neutral towards these programmes fell into the older age groups. Majority of pharmacists were involved in informal CE.

Although most pharmacists show active involvement in activities related to enhancing professionalism, certain factors indicated some shortcomings: involvement in community related issues, promotions and activities, provision of in-house staff training, the provision of incentives for employees and the provision of additional services. Most pharmacists were actively involved in the provision of pharmaceutical care and all pharmacists indicated compliance with GPP standards.

Additional findings from the pharmacist survey were presented under analysis of open-ended questions.

The findings of the customer survey revealed the following:

Most customers were in agreement with factors in each section of the survey. Favourable service encounters with the pharmacist and employees and overall satisfaction with the general evidence of service indicated that customers were pleased with the overall quality of services provided in retail community pharmacies. Certain factors that indicated shortcomings included: staff training, patient education, waiting times and the provision of counselling areas.

Additional findings from the customer survey were presented under analysis of open-ended questions.

CHAPTER 5
RESEARCH CONCLUSIONS AND RECOMMENDATIONS

5.1 INTRODUCTION

This study involved an attempt to evaluate professionalism of retail community pharmacists and quality of services provided to customers in retail pharmacies. This was done to observe overall trends in retail pharmacy and in so doing:

- To provide valuable information to retail pharmacists on aspects where they could improve with regard to enhancing professionalism through elements covered in this study.
- To provide feedback to retail pharmacists on how customers perceive the quality of services provided to them in retail pharmacies, in general. Pharmacists could then use this information to fill existing "gaps" and thereby provide higher quality services.

Bringing such information to light and using it, can provide a means to raise industry standards as well as level of health care provided to patients.

5.2 RESEARCH CONCLUSIONS

- The first objective of the study was an evaluation of levels of professionalism amongst retail community pharmacists. The study revealed that most pharmacists are actively involved in those aspects related to enhancing professionalism. Pharmacists are becoming increasingly aware of the broader scope of the practice of the profession and are embracing the move from product-orientated care to patient-orientated care. Therefore, data obtained from this study indicate moderate to high levels of professionalism in retail community pharmacies.

- The second objective of the study was an evaluation of quality of services provided to customers in retail pharmacies. Overall, customers

rated the quality of services provided to them in retail pharmacies as good to excellent.

For those shortcomings that were identified in the study, the following recommendations are made.

5.3 RECOMMENDATIONS

The Implementation of Mandatory CPD

Although most pharmacists opt for voluntary CPD, the best way forward is implementation of mandatory CPD. This will ensure CPD and assessment on an ongoing basis which may be the best form of control and development of lifelong competence of the pharmacist.

Staff Training and Education

The success of a pharmacy can be largely in the hands of pharmacy staff or employees. Opportunities must be taken to upgrade their performance. Career advancement opportunities must be defined, e.g. look toward registration as pharmacy or pharmacist assistants.

Expanding the role of the pharmacist assistant should be closely looked at. Increasing their responsibilities can increase job satisfaction and at the same time, give pharmacists more time to devote to patient care activities.

Internal service marketing should not be ignored since much of staff training has more to do with attitudes than skills. Issues including worker motivation and employee empowerment should be looked at.

Patient Education

Explaining medical terms clearly, provision of proper advice as well as the provision of additional information (e.g. computer print outs or pamphlets) can all play a role in compliance with treatment.

Another aspect of patient education is the need to educate customers or patients as to the standard of practice that should be upheld in pharmacies.

The Provision of Counselling Areas

Many customers were unsure of this factor in the study. Customers must be made aware of such an area so that they feel comfortable and have privacy when they require it.

The Inclusion of In-Store Clinic Facilities or at least the provision of special services at a nominal charge to patients.

Decrease Waiting Times for Customers

Community Involvement and Promotional Activities

More active involvement of pharmacists in these issues is necessary to add value to the communities they serve.

Set Attainable Service Standards

Assess company and competitor performance against customer expectations. Anticipate customer needs and service those needs. Tailor the store to meet customer demands and build on these demands by giving more than is expected.

Set about discovering community needs and adjust practices to cater for the local community.

Monitor Service Delivery

Customer satisfaction and success must be monitored, e.g. by undertaking periodic customer surveys or mystery shoppers.

5.4 SUMMARY

This study has been instrumental in demonstrating that overall trends in retail community pharmacy point to pharmacists' increasing awareness and

involvement in aspects related to enhancing professionalism, as well as societal trends that point to customers' evaluating overall quality of services as good to excellent. The reaction to enhancing professionalism is occurring to varying degrees.

Although the study demonstrated this, some shortcomings were identified. Corrective actions for such shortcomings were mentioned above, as recommendations.

This study can hopefully play a pivotal and strategic role in hypothesis generation for future work in this area.

BIBLIOGRAPHY

Aaker, D.A., Kumar, V. & Day, G.S. 2001. *Marketing Research,* 7th ed., Wiley, New York.

Annual Report (1999). South African Pharmacy Council.

Annual Report (2000). South African Pharmacy Council.

Barker, A. (2000). *The Knowledgeable Patient*, Modern Pharmacy, February, Vol. 7(2), p.6.

Beaumont, V. (2001). *New Future for Pharmacists' Assistants – New Lease on Life for Pharmacy*, SA Pharmacist Assistant, March/April, Vol. 1(2), pp.3-4.

Berger, B. (2000). *Listening and Empathic Understanding*, Modern Pharmacy, September, Vol. 7(9), pp.21-26.

Berry, L.L. and Parasuraman, A. (1991). *Marketing Services: Competing through Quality*. Free Press, New York.

Berry, L.L., Parasuraman, A. and Zeithaml, V.A. (1985). *A Conceptual Model for Service Quality and its Implications for Future Research*, Journal of Marketing, Fall, Vol. 49, pp.41-50.

Berry, L.L., Parasuraman, A. and Zeithaml, V.A. (1990). *Five Imperatives for Improving Service Quality*, Sloan Management Review, Summer, pp.29-38.

Bhoola, K. and Makin, V. (2001). *Strategic Dynamics in the Retail Pharmaceutical Sector*, South African Pharmaceutical Journal, June, pp.40-47.

Blott, L. (2001). *Pharmaceutical Care*, Front Shop, September, pp.4-6.

Bolleurs, A. (1999). *Continuing Education*: *A New Focus*, Modern Pharmacy, February, Vol. 6(2), pp.4-5.

Boschmans, S. and Perkin, M. (1999). *Pharmaceutical Care – Getting Started*, Modern Pharmacy, August, Vol. 6(8), pp.4-5.

Carapinha, J. (2001). *Continued Professional Development as an Aspect of Human Resource Management*, South African Pharmaceutical Journal, January/February, Vol. 68(1), p.5.

Cooper, D.R. and Schindler, P.S. (1998). *Business Research Methods*, 6th ed. Irwin/McGraw-Hill, Singapore.

De Nicola, T. (1997). *Pharmaceutical Services in the United States*, Modern Pharmacy, October, Vol. 4(10), pp.4-8.

FIP Abstracts, August 2000.

FIP Abstracts, September 1999.

Futter, B. (1999). *Assuring quality in pharmacy practice*, Modern Pharmacy, September, Vol. 6(9), pp.4-8.

Kairuz, T. (2000). *Continuing Education in South Africa*: *What do Pharmacists Want*?, Pharmaciae, November, Vol. 8(5), pp.10-11.

National Publishing. 2000 *In search of the communities' finest pharmacy*, Modern Pharmacy, February, Vol. 7(2), p.36.

National Publishing. 2000. *A yellow ribbon on June 26 says your pharmacy is Drug Wise*, Modern Pharmacy, June, Vol. 7(6), p.24.

National Publishing. 2001. *CPD Strategy for Pharmacists*, Modern Pharmacy, May, Vol. 8(5), p.4.

National Publishing.2001. *Pharmacy of the Year*, Modern Pharmacy, March, Vol. 8(3), pp.16-17.

Osman, L. (2001). *Pharmacist's Assistants – Important Support Personnel in Pharmacy*, SA Pharmacist, January/February, Vol. 1(1), pp.4-5.

Rochat, C. (2001). *Continuing Professional Development – the time has come*, SAAHIP Newsletter, July, p.1.

Roux, J. (2001). *Use your best weapons*!, Modern Pharmacy, June, Vol.8(6), pp.4-5.

South African Pharmacy Council. 1999. *Co-operation with Health Care Professionals.* Pharmaciae, October-December, Vol. 7(3), pp. 14-15.

South African Pharmacy Council.1999. *Do you comply with Good Pharmacy Practice Standards.* Pharmaciae, June-September , Vol. 7(2), pp.11-14.

South African Pharmacy Council.2000. *Patients' Rights Charter*, Pharmaciae, February , Vol. 8(1), pp.7-8.

South African Pharmacy Council.2001. *Findings of Inspections of Pharmacies Conducted During 2000*, Pharmaciae, December , Vol. 9(5), pp.12-13.

Truter, I. (2000). *An Overview of Business Ethics*, South African Pharmacy Journal, August, Vol. 67(7), pp.28-32.

Truter, I. (2001). *An Overview of Quality in Service Delivery*, South African Pharmacy Journal, August, Vol. 68(7), pp.40-45.

APPENDIX A

UNIVERSITY OF NATAL
GRADUATE SCHOOL OF BUSINESS

Pharmacist Survey to Evaluate Professionalism Amongst Retail Community Pharmacists

Dear Sir/Madam

It would be valued highly if you could provide the following information regarding professionalism amongst retail community pharmacists. Please read the instructions for each section carefully and answer them as best as you can. All the provided information will be treated as confidential.

Section A: Demographics

The following questions about yourself are required for classification purposes. Please put a cross into the appropriate box.

1. Gender: [1] Male ☐ [2] Female ☐

2. Age: [1]21-30 ☐ [2]31-40 ☐ [3]41-50 ☐ [4]51-60 ☐ [5]Over 60 ☐

3. Type of Pharmacy
   - [1]Group ☐
   - [2]Chain ☐
   - [3]Individually owned ☐

4. Percentage of prescription vs Front Shop Business
   - [1] 0 : 100 ☐
   - [2] 20 : 80 ☐
   - [3] 40 : 60 ☐
   - [4] 60 : 40 ☐
   - [5] 80 : 20 ☐
   - [6]100 : 0 ☐

Section B

The following questions deal with continuing professional development (CPD), community involvement, the provision of additional services, compliance with Good Pharmacy Practice (GPP) standards, the provision of pharmaceutical care, staff training and relationship with other health care professionals.

5. Are you involved or have been involved in any continuing education courses or any other formal professional development training?

   [1]Yes ☐ [2]No ☐

6. If you have answered yes to the above question, how recent has this been?

[1]In the past year	☐
[2]Within the past 2 years	☐
[3]More than 2 years ago	☐
[4]Not applicable	☐

7. What is your attitude towards the proposed implementation of CPD programmes for pharmacists? (Programmes to assess the competence of the pharmacist to practice his/her profession.)

[1]Very positive	☐
[2]Positive	☐
[3]Neutral	☐
[4]Negative	☐
[5]Very negative	☐

For the following questions, please indicate your choice by circling the appropriate number.

1 = always; 2 = often; 3 = sometimes; 4 = seldom; 5 = never.

8.	I am involved in community related issues, e.g. drug awareness campaigns, community related projects, talks/lectures in schools.	1	2	3	4	5
9.	Promotions and activities are held to create awareness (e.g. during Pharmacy Week)	1	2	3	4	5
10.	I do spend time reading journal articles, publications or other literature to improve my knowledge and expertise.	1	2	3	4	5
11.	Valuable information is passed on to pharmacy staff to broaden their knowledge.	1	2	3	4	5
12.	In-house training is provided for pharmacy staff.	1	2	3	4	5
13.	Incentives are provided to support worker motivation and teamwork.	1	2	3	4	5
14.	Pharmacy staff attend workshops, seminars or talks held by pharmaceutical wholesalers or other associations.	1	2	3	4	5
15.	Optimal pharmaceutical care is provided to patients.	1	2	3	4	5
16.	Patients' needs are identified and well established.	1	2	3	4	5
17.	Patient profiles are recorded.	1	2	3	4	5
18.	Patient counselling including patient education, administration of medication, advice on the safe and proper use of medication, is provided.	1	2	3	4	5

19. Medication adherence and compliance is evaluated. 1 2 3 4 5

20. Monitoring and continuous follow-up of the patient's clinical condition is carried out. 1 2 3 4 5

21. Are you a Drug Wise Counsellor?

[1]Yes ☐ [2]No ☐

22. Are any of your staff registered pharmacy or pharmacist assistants?

[1]Yes ☐ [2]No ☐

23. If you provide in-house training for your staff describe how this training is carried out.

.....
.....
.....

24. Is there a private consultation and counselling area provided for your patients in the pharmacy?

[1]Yes ☐ [2]No ☐

25. How would you describe your relationship with other members of the health care team?

.....

26. Do you easily make contact with prescribing doctors or other members of the health care team if the need arises, e.g. queries on prescriptions?

[1]Yes ☐ [2]No ☐

	[1]Yes	[2]No
27. The pharmacy has in-store clinic facilities.		
28. Special services are provided, e.g. blood pressure/glucose testing.		
29. An after hours emergency service is provided.		
30. Delivery services are provided.		
31. The level of pharmaceutical care provided to patients would change if professional remuneration fees for these services were introduced.		

32. Does the pharmacy trading hours include:

[1]Sundays	☐	[3]Both	☐
[2]Public Holidays	☐	[4]Neither one	☐

The following questions deal with compliance with GPP standards. Please cross the appropriate box.

	Does not Comply	Partially Complies	Complies	Exceeds Compliance
33. Registration details				
34. Premises layout.				
35. Equipment.				
36. References, e.g. MIMS/SAMF				
37. Storage and medicine control				
38. Dispensing of prescriptions				
39. Provision of pharmaceutical care				
40. Record keeping.				

41. Please provide in detail your involvement in community related issues and promotional activities (if applicable).

.....
.....
.....

42. List any factors you consider important in the provision of pharmaceutical care to your patients.

.....
.....
.....

43. List any factors you consider important in maintaining the professional image of the pharmacy profession.

.....
.....
.....
.....
.....

Thank you for taking the time to complete this questionnaire.

APPENDIX B

UNIVERSITY OF NATAL
GRADUATE SCHOOL OF BUSINESS

Customer Survey to Evaluate Quality of Services Provided By Retail Community Pharmacists

Dear Sir/Madam

It would be valued highly if you could provide the following information regarding the quality of services you receive when visiting a retail pharmacy in your area. Please read the instructions for each section carefully and answer them as best as you can. All the provided information will be treated as confidential.

Section A: Demographics

The following questions about your self are required for classification purposes. Please put a cross into the appropriate box.

1. Gender: [1] Male ☐ [2] Female ☐

2. Age: [1] 18-25 ☐ [2] 26-35 ☐ [3] 36-45 ☐ [4] 46-55 ☐ [5] Over 56 ☐

3. Are you a: [1] Medical Aid Patient ☐ [2] Private (Cash) Patient ☐

4. I consider myself to be a:
   [1] Regular Customer (frequent visits to pharmacy - repeat customer) ☐
   [2] Not a regular customer (seldom visits to pharmacy) ☐

5. Do you have:
   [1] One set pharmacy that you frequent ☐
   [2] More than one pharmacy ☐
   [3] One set pharmacy but will visit another if your regular pharmacy cannot provide the services ☐

Section B : Service encounters with the Pharmacist

This part of the questionnaire deals with how you perceive your interactions with the pharmacist in terms of quality of services provided to you. Please rate how strongly you agree or disagree with each statement by circling the appropriate number.

1 = strongly agree; 2 = agree; 3 = unsure; 4 = disagree; 5 = strongly disagree.

6. The pharmacist gives me unique individual attention. 1 2 3 4 5

7.	The pharmacist is never too busy to respond to my requests and needs.	1	2	3	4	5
8.	I am made to feel welcome, treated with dignity and well respected by the pharmacist.	1	2	3	4	5
9.	The pharmacist identifies me by name.	1	2	3	4	5
10.	I find the pharmacist approachable and can identify him/her by name.	1	2	3	4	5
11.	The pharmacist ensures confidentiality about my illness and treatment.	1	2	3	4	5
12.	If I require privacy with the pharmacist, there is a suitable private counselling area in the pharmacy.	1	2	3	4	5
13.	I receive the right medicines in the right quantities.	1	2	3	4	5
14.	I receive proper advice and counselling regarding the safe and appropriate use of medication.	1	2	3	4	5
15.	Medical terms are clearly explained to me.	1	2	3	4	5
16.	Additional information is supplied to me when I receive medication (e.g. pamphlets or computer printouts).	1	2	3	4	5
17.	There are information booklets and pamphlets readily available to me in the pharmacy.	1	2	3	4	5
18.	The pharmacist monitors and evaluations my condition efficiently.	1	2	3	4	5
19.	If I require OTC (over the counter medicines), the pharmacist helps me to select affordable, effective and quality medicine	1	2	3	4	5
20.	Any side effects or adverse reactions are explained to me.	1	2	3	4	5
21.	The pharmacist evaluates a prescription to identify any possible problems (e.g. queries regarding medication, dosages).	1	2	3	4	5
22.	The pharmacist willingly contacts the doctor if the need arises.	1	2	3	4	5
23.	The pharmacist is caring and understanding, shows concern and empathy, and always listens to me.	1	2	3	4	5
24.	I can visit the pharmacist even if it is only for advice.	1	2	3	4	5
25.	I do not have a long waiting time to receive service.	1	2	3	4	5
26.	I am pleased with the manner in which a pharmacist performs his/her services.	1	2	3	4	5

Section C: Service encounters with pharmacy employees

Please rate how strongly you agree or disagree with each statement by circling the appropriate number.

1 = strongly agree; 2 = agree; 3 = unsure; 4 = disagree; 5 = strongly disagree.

27.	I am greeted with warmth, acknowledged and made to feel welcome by pharmacy staff.	1	2	3	4	5
28.	I receive prompt and efficient service from pharmacy staff.	1	2	3	4	5
29.	I am treated with respect and friendliness.	1	2	3	4	5
30.	Pharmacy staff are helpful and willing to assist me.	1	2	3	4	5
31.	Pharmacy staff are properly trained and have the necessary knowledge to assist me.	1	2	3	4	5
32.	The pharmacy is well stocked and I most often find what I am looking for.	1	2	3	4	5
33.	If I have difficulty in finding something, pharmacy staff are willing to assist me.	1	2	3	4	5
34.	If something is not immediately available to me, proper alternate arrangements are made.	1	2	3	4	5
35.	I do not have a long waiting time to receive service from pharmacy staff.	1	2	3	4	5
36.	Employees are courteous and inspire trust and confidence in me.	1	2	3	4	5
37.	Pharmacy staff are neatly attired.	1	2	3	4	5

Section D : Evidence of Service

Please rate how strongly you agree or disagree with each statement by circling the appropriate number.

1 = strongly agree; 2 = agree; 3 = unsure; 4 = disagree; 5 = strongly disagree.

38.	The pharmacy environment is clean, tidy, organised and pleasant to shop in.	1	2	3	4	5
39.	A warm atmosphere prevails throughout the pharmacy.	1	2	3	4	5
40.	The pharmacy portrays a professional image.	1	2	3	4	5
41.	Store layout is good, with ample space, free flow and no congestion.	1	2	3	4	5

42.	Business hours are known to me.	1	2	3	4	5
43.	Business hours are convenient and reasonable.	1	2	3	4	5
44.	The pharmacy offers an emergency after hours service (e.g. after hours telephone number is available).	1	2	3	4	5
45.	Efficient delivery services are offered.	1	2	3	4	5
46.	There is ample parking space available to me.	1	2	3	4	5
47.	Special services are available at the pharmacy (e.g. blood pressure/glucose/cholestrol testing, clinics, etc).	1	2	3	4	5
48.	I find/would find these services very useful in a pharmacy setting.	1	2	3	4	5

Section E : General

49. How would you rate the overall quality of customer services provided to you in community pharmacies in your area?

[1]Poor	☐	[4]Excellent	☐
[2]Fair	☐	[5]Exceeds excellence	☐
[3]Good	☐		

50. List 3 most important reasons why you frequent the pharmacy of your choice.

.....
.....
.....

51. List any difficulties experienced when visiting a pharmacy in your area.

.....
.....
.....

52. List any recommendations that you consider important to improve overall quality of customer services provided to you by pharmacies in your area.

.....
.....
.....
.....
.....

Thank you for taking the time to complete this questionnaire.

APPENDIX C

Reliability

Item-total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Alpha if Item Deleted
C6	41.9600	143.9308	.5699	.9107
C7	41.8667	148.6306	.4303	.9136
C8	42.0533	146.6458	.5975	.9106
C9	41.7600	134.6443	.6940	.9078
C10	41.9067	140.1668	.6685	.9083
C11	42.2533	147.3809	.5539	.9114
C12	41.4533	142.5214	.5468	.9114
C13	42.2400	153.9686	.2127	.9170
C14	42.2667	147.1712	.5775	.9110
C15	41.8133	138.3701	.6676	.9083
C16	41.5600	140.8984	.5795	.9107
C17	41.8000	143.8378	.5895	.9103
C18	41.2933	140.7236	.6571	.9086
C19	41.9600	140.6065	.7420	.9070
C20	42.0267	140.4587	.7346	.9071
C21	42.0267	141.2155	.7913	.9064
C22	41.9467	143.2404	.5866	.9103
C23	41.9733	140.6750	.7106	.9075
C24	42.0267	142.3506	.6937	.9082
C25	40.4267	165.8966	-.3113	.9308
C26	42.0533	146.4025	.5961	.9106

Reliability Coefficients

N of Cases = 75.0 N of Items = 21

Alpha = .9149

Reliability

Item-total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Alpha if Item Deleted
C27	20.4133	23.4620	.7606	.7668
C28	20.2000	21.8378	.6939	.7649
C29	20.5067	24.7939	.6708	.7790
C30	20.4400	23.7362	.7260	.7702
C31	20.1067	22.2047	.7149	.7638
C32	20.2267	26.5831	.1723	.8245
C33	20.5467	24.8998	.5865	.7836
C34	20.2533	23.6512	.4873	.7902
C35	18.7200	29.6368	-.1441	.8747
C36	20.2533	24.5431	.6263	.7798
C37	20.6000	25.2703	.5807	.7855

Reliability Coefficients

N of Cases = 75.0 N of Items = 11

Alpha = .8071

Reliability

Item-total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Alpha if Item Deleted
C38	19.6933	27.7020	.5739	.7413
C39	19.5200	27.6854	.5405	.7424
C40	19.5600	27.8714	.5637	.7429
C41	19.3733	26.1020	.5677	.7320
C42	19.4133	26.4350	.5812	.7329
C43	19.2667	25.9550	.5167	.7354
C44	18.3200	22.7611	.5119	.7357
C45	18.7600	23.7795	.4895	.7376
C46	18.5333	23.5495	.4556	.7453
C47	18.8933	26.5290	.2750	.7691
C48	19.6000	31.1351	-.0676	.7911

Reliability Coefficients

N of Cases = 75.0 N of Items = 11

Alpha = .7645

APPENDIX D

T-Test 1

Group Statistics

	C1 Gender	N	Mean	Std. Deviation	Std. Error Mean
B Service encounters with pharmacist	Male	28	41.89	10.66	2.02
	Female	47	45.15	13.56	1.98
C_ Service encounters with pharmacy employees	Male	28	22.11	5.12	.97
	Female	47	22.30	5.62	.82
D Evidence of service	Male	28	20.61	5.31	1.00
	Female	47	21.38	5.77	.84

Independent Samples Test

		t-test for Equality of Means		
		t	df	Sig. (2-tailed)
B Service encounters with pharmacist	Equal variances assumed	-1.085	73	.281
C_ Service encounters with	Equal variances assumed	-.147	73	.884
D Evidence of service	Equal variances assumed	-.580	73	.564

T-Test 2

Group Statistics

	C3	N	Mean	Std. Deviation	Std. Error Mean
B Service encounters with pharmacist	Medical Aid Patient	35	41.09	12.78	2.16
	Private (Cash) Patient	40	46.43	12.02	1.90
C_ Service encounters with pharmacy employees	Medical Aid Patient	35	20.91	5.97	1.01
	Private (Cash) Patient	40	23.38	4.63	.73
D Evidence of service	Medical Aid Patient	35	20.91	5.57	.94
	Private (Cash) Patient	40	21.25	5.65	.89

Independent Samples Test

		t-test for Equality of Means		
		t	df	Sig. (2-tailed)
B Service encounters with pharmacist	Equal variances assumed	-1.863	73	.066
C_ Service encounters with	Equal variances assumed	-2.007	73	.048
D Evidence of service	Equal variances assumed	-.258	73	.797

T-Test 3

Group Statistics

	C4	N	Mean	Std. Deviation	Std. Error Mean
B Service encounters with pharmacist	Regular Customer (frequent visits to pharmacy -repeat custom	36	40.97	11.70	1.95
	Not a regular customer (seldom visits to pharmacy)	39	46.67	12.90	2.07
C_ Service encounters with pharmacy employees	Regular Customer (frequent visits to pharmacy -repeat custom	36	21.58	5.94	.99
	Not a regular customer (seldom visits to pharmacy)	39	22.82	4.86	.78
D Evidence of service	Regular Customer (frequent visits to pharmacy -repeat custom	36	21.36	5.30	.88
	Not a regular customer (seldom visits to pharmacy)	39	20.85	5.88	.94

Independent Samples Test

		t-test for Equality of Means		
		t	df	Sig. (2-tailed)
B Service encounters with pharmacist	Equal variances assumed	-1.997	73	.050
C_ Service encounters with	Equal variances assumed	-.990	73	.325
D Evidence of service	Equal variances assumed	.397	73	.692

Oneway ANOVA with AGE

Descriptives

		N	Mean	Std. Deviation
B Service encounters with pharmacist	18-25	19	46.16	13.17
	26-35	24	45.75	13.82
	36-45	16	43.88	12.46
	46-55	12	39.42	9.68
	Over 56	4	36.25	8.02
	Total	75	43.93	12.59
C_ Service encounters with pharmacy employees	18-25	19	22.68	4.46
	26-35	24	23.96	5.21
	36-45	16	21.81	5.01
	46-55	12	20.00	6.76
	Over 56	4	18.00	5.48
	Total	75	22.23	5.40
D Evidence of service	18-25	19	21.42	6.40
	26-35	24	20.67	5.52
	36-45	16	22.19	4.82
	46-55	12	20.50	5.28
	Over 56	4	19.50	7.51
	Total	75	21.09	5.58

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
B Service encounters with pharmacist	Between Groups	654.224	4	163.556	1.035	.396
	Within Groups	11066.443	70	158.092		
	Total	11720.667	74			
C_ Service encounters with pharmacy employees	Between Groups	209.646	4	52.411	1.880	.124
	Within Groups	1951.501	70	27.879		
	Total	2161.147	74			
D Evidence of service	Between Groups	39.944	4	9.986	.309	.871
	Within Groups	2262.402	70	32.320		
	Total	2302.347	74			