# Open Ownership Of Pharmacies Reduces The Quality Of Pharmaceutical Care For The Consumer

# Kevin Naicker 202500435

In part fulfilment of the requirements of the Master of Business Administration Degree for the Graduate School of Business at the University of Natal - Durban

Supervisor : M. Patel

Date Submitted:

September 2003

## **Acknowledgements**

My sincere thanks and gratitude is extended to everyone who assisted me with the research and preparation of this dissertation. In particular I would like to thank the following people:

To my supervisor, Mrs M. Patel for her time, effort and invaluable guidance in the structure and content of this dissertation.

To my parents and family for their support and encouragement throughout my years of study and especially during this research.

I wish to thank Mr H.T. Howieson and Mr A. Patel for guiding me in my development as a pharmacist.

My sincere thanks is extended to Veloshini Naicker, my friend and colleague in practice, for her support, encouragement and assistance.

096960

### **Abstract**

South Africa is currently grappling with amendments to a number of laws relating to the supply of drugs. One of these amendments removes the requirement that only a pharmacist may own an interest in a retail pharmacy. While this may be opposed by retail pharmacists, the question is really: Will this measure benefit consumers by improving the access to drugs by bringing to this sector a measure of competition and hence reduced prices or will this measure reduce the quality of pharmaceutical care for consumers due to a lack of a relationship based on trust? The emergence of brands such as HealthPharm (Pick 'n Pay), Purchase Milton & Associates- PM&A (New Clicks), and the Checkers (Shoprite Group of Companies) are becoming increasingly popular among consumers (Andy Gray, 1997). This study investigates the impact of these changes on the consumer receiving affordable quality pharmaceutical care. It aims to establish a relationship between consumers and their pharmacist that is based on trust. Quantitative analysis of consumers and pharmacists revealed that there is a relationship based on trust between these parties. Statistical analysis of these samples also reveal a consumer trend suggesting that consumers and pharmacists require a relationship based on trust to achieve the goals of pharmaceutical care. Open ownership of pharmacies will not provide the consumer with an opportunity to develop this relationship with their pharmacist and thus reduce the quality of pharmaceutical care received.

# **List of Tables**

	Page
Table 1: Distribution of Respondents' Compliance to Pharmaceutical Care	42
Table 2: Distribution of Consumers' Age by Duration of Association with Pharmacist	44
Table 3: Distribution of Pharmaceutical Service Recommendation	46
Table 4: Distribution of Consumers' Trust in Sole Owner Pharmacist	47

# **List of Figures**

<u>1</u>	Page
Figure 1: The Transfer of Meaning from a Pharmacist to Product to Consumer	25
Figure 2: Age Distribution of Consumers	31
Figure 3: Income Distribution of Consumers	32
Figure 4: Distribution of Medical Aid Scheme Membership of Consumers	33
Figure 5: Distribution of Specific Pharmacy Usage by Consumers	34
Figure 6: Distribution of Length of Similar Pharmacy Attendance of Consumers	35
Figure 7: Distribution of Services Required by Consumers vs. Services Offered by Pharmacists	36
Figure 8: Distribution of Respondents' Satisfaction of Current Services Offered	37
Figure 9: Distribution of Preference and Level of Satisfaction of Chain Store Pharmacies	s 38
Figure 10: Distribution of Sole Pharmacy Owner Satisfaction with Level of Service from Part-Time Pharmacists	39
Figure 11: Distribution of Respondents' Purchasing Comfort in an Open Ownership Pharmacy	40
Figure 12: Distribution of Respondents' Confidence in Successful Treatment	41
Figure 13: Distribution of Absolute Consumer Compliance of Advice Provided by Pharmacists	42

Figure	14: Distri	bution o	of Length of	of Relation	ship betwee	n Respond	ents and P	harmacists	45

Figure 15: Distribution of Respondents' Pharmaceutical Service Recommendation 46

# **Table of Contents**

	Page
Acknowledgements	i
Abstract	i
List of Tables	iii
List of Figures	iv
Chapter 1: Overview	
1.1. Background	1
1.2. Rationale	2
1.3. Objectives	3
1.4. Hypothesis	3
1.5. Key Words	4
1.6. Assumptions	4
1.7. Selection of Research Topic	4
1.8. Summary	5
1.9. Chapter Outline	6
Chapter 2: Background and Literature Review	
2.1. Background	
2.1.1. New Clicks	7
2.1.2. Pick 'n Pay	10
2.1.3. Pharmacists' View	10
2.1.4. Government View	11
2.2. Consumer Behaviour	13
2.3. Opinion Leadership	21

2.4. Source Characteristics	
2.4.1. Credibility	22
2.4.2. Physical Attractiveness	23
2.4.3. Likeability	24
2.4.4. Meaningfulness	24
Chapter 3: Research Methodology	
3.1. Sampling and Method	27
3.2. Procedure	28 28
<ul><li>3.3. Validity and Reliability Testing</li><li>3.4. Questionnaire Analysis</li></ul>	29
3.5. Reporting Errors	30
Chapter 4: Research Findings	
4.1. Demographics	31
4.2. Product Purchasing and Sales Behaviour	34
4.3. Pharmacist-Patient Relationship	40
Chapter 5: Conclusions and Recommendations	
5.1. Conclusion	48
5.2. Implication and Limitations of Research	49
5.3. Recommendations for Future Research	52
References	53
Appendices	56

## Chapter 1

## 1. Overview

### 1.1 Background

The South African pharmaceutical market is by far Africa's most vibrant. At producers' prices, the market was valued at US\$663 million in 2001 and US\$814 million in 2002. Drugs account for 18% of total healthcare bill, relatively high by global standards. Private domestic expenditure in constant figures has risen by 68% since 1991 wildly outstripping consumption of both durable and non-durable goods (to which medicines belong) over the same period. Medical schemes have become an increasingly important way for South Africans to pay for their healthcare, including medicines. Trends in membership and benefits have an important effect on pharmaceutical sales as 16% of the population accounts for 41% of the health expenditure. The volume of transactions is not great and is spread thinly among retailers resulting in small profit margins. Retailers looking for business from medical schemes have had to compete by offering discounts, which have diminished turnover even further. (Henry Dummett, 2002)

United South African Pharmacies (U.S.A.P.), which represents about two-thirds of independent retail pharmacies in South Africa, believes that big retail firms should only be allowed in locations that are not currently serviced. It will be up to the Health Minister to determine in which cases pharmacies can be licensed. The governments' imperative is to extend pharmacy service to remote and poor areas.

(Sunday Times, July 2002)

http://www.sundaytimes.co.za/2002/07/21/business/companies/comp01.asp

#### 1.2 Rationale

Nothing worked for nine months. Dr Cynthia Gilbert desperately tried one available antibiotic after another on her 57-year old kidney patient, but no matter which tablet, capsule or even intravenous injections-she gave him from plain vanilla ampicillin to fancy experimental teicoplanin- the man's blood was still flooded with the enterococcus bacteria, which were slowly poisoning his red blood cells. So one morning, Gilbert gathered her courage and walked softly into the man's room. "I guess you're coming to tell me I'm dying," he said. Nothing had worked, she explained: they had run out of options. The correct treatment was not available in South Africa's retail pharmacy sector due to corporate, bureaucratic and political legislation. The 21<sup>st</sup> century ownership of pharmacies had failed to satisfy the consumer demand. Several days later the man died of a massive bacterial infection of the blood and heart. (Begley, 2000)

South Africa's healthcare industry is in for a major upheaval over the next couple of years as the government begins its plan to improve access to healthcare and reduce the cost of medicines. The industry shake-up starts in April effecting legislation that has been in the pipeline since 1997. Of immediate concern to the retail sector is the deregulation of pharmacy ownership on condition that qualified pharmacists are employed to run them. (Sunday Times, February 2002)

http://www.sundaytimes.co.za/2002/07/21/business/news/news01.asp

South Africa's government have given decades-long regulatory protection to independent pharmacies. Retailers have persistently influenced regulations and legislations, have managed to use "legal processes to slow advances in distribution", and have hampered developments ranging from "cost-reducing devices, such as attainment of economies of scale, to more recent innovations designed explicitly to contain the cost of medicines." Legislation and regulations motivated by interest groups such as retail pharmacists prevent pharmaceutical manufactures from seeking the most efficient methods of pricing and distributing their products. Consumer choice is reduced in the process and consumers ultimately pay the cost of resulting inefficiencies. Changes in legislation will reduce price discrimination ultimately benefiting the patients as consumers. New methods of distribution of pharmaceutical products will encourage the retail pharmacy profession to adjust to changing circumstances. (Reekie, 1997)

For far too long, every player in the distribution chain stretching from the manufactures' gate to the pharmacies' shelf has been allowed to add its own mark-up to the medicines sold, unchecked. Consumers pay dearly, both directly from their pockets, and indirectly in the form of their monthly medical aid contributions. In 2001, the schemes paid out more than R9.7 billion for drugs, accounting for 30% of annual spend. Pharmaceutical manufactures, wholesalers and retailers are all awaiting clarity on the health department's vision of a "transparent system" for medicines. The pricing committee's function is to develop a 'single exit price' for medicines. Instead of adding percentage mark-ups, retail pharmacists will in future be compensated with a flat-rate fee determined by the committee. It is expected that this professional fee will be somewhere in the region of R24-R28 an item. (Khan, 2003)

### http://allafrica.com/stories/200304100496.html

In theory, these changes seem to be unquestionably beneficial to the South African healthcare system, however, the researcher questions whether in practice, the new open ownership of pharmacies within the system will provide the necessary quality of pharmaceutical care for the consumers that has thus far been provided for by privately owned pharmacies.

#### 1.3. Objectives

The aim of this dissertation is to prove that open ownership of pharmacies will reduce the quality of pharmaceutical care for consumers. It aims to establish the existence of a relationship between consumers and their pharmacist that is based on trust. The dissertation argues that without this relationship, the quality of pharmaceutical care that consumers receive will be drastically reduced. Thus the core objective is proven, as this is not part of the open ownership pharmacy business model.

#### 1.4. Hypothesis

 $\mathbf{H_0}$ : Consumers will not be able to develop a relationship based on trust in open

ownership pharmacies

H<sub>a</sub>: Consumers will be able to develop a relationship based on trust in open

ownership pharmacies

#### 1.5. Key Words

#### **Open Ownership**

Deregulate ownership and participation by non-pharmacists subject to licensing criteria that are consistent with national health and drug policies.

#### Pharmaceutical Care

Pharmaceutical care is the relationship between the pharmacy profession and society in which the profession accepts responsibility for the supply and use of drugs by society as a whole and for each and every patient. This definition is deliberately broad in that it describes the overall responsibility that the profession has for pharmacotherapy. The emphasis is on the professional relationship that is built on trust, confidence and caring.

http://www.ru.ac.za/academic/departments/pharmacy/pap/pubs/pcare/chapter4.htm

#### 1.6. Assumptions

In the formulation and testing of the hypothesis as well as the presentation of the results the following assumptions were made:

- Open ownership of pharmacy will improve the economies of scale thus decreasing the cost of quality healthcare to patients
- All patients and pharmacist are unaware of the full impact of the current changes in legislation on the healthcare system
- Sample members are independently chosen and experimental set-up is unchanging over the period of study

### 1.7. Selection of Research Topic

The researcher is a pharmacist who is presently serving his community service. Having completed his internship in a retail pharmacy, he developed a personal interest in this area. The selection of the focus of study was unequivocally decided upon as the researcher work environment is currently in the midst of dynamic changes. An intense information search was

conducted to test for the availability of resources both literal and experiential. The following was discovered:

Market Problem : Expensive private retail healthcare cost of medicines

Solution : Open-ownership of pharmacies

Patients : Consumers

Authorities : Medical Aids and Government

Healthcare Provider : Pharmacist

The patients and healthcare providers formed the target group. The research problem discovered: Consumers will not receive the same quality of pharmaceutical care from chain store owned pharmacies.

#### 1.8. Summary

In the past few weeks the researcher has received an invaluable amount of knowledge. The researcher has developed his skills in researching, for example, persistence; patience; understanding; expression of ideas with variable means; acceptance and pleasure in the accomplishment of selected targets. The researcher looks forward to future study and hopes that the skills that he has developed will aid him in not only learning more about the area of focus but also in overcoming the forthcoming challenges with enthusiasm. The researcher recognizes that it would be impossible to cover the entire area of study and that the research is limited by the above assumptions. The researcher hopes that his work will inspire further studies into this area perhaps, testing the assumptions that the researcher has made and yielding results of an innovative perspective if not supporting the present study.

Patients are suffering from the increasing cost of medicines especially since the amount of disposable income is reducing in our declining economy. Healthcare is a primary need of an individual as it threatens one's existence. This leaves the consumer at a major disadvantage, begging at the mercy of pharmaceutical community for his/her survival. The changes in legislation are driven by a strong need for a transparent affordable quality healthcare system. Whether these changes will realise our governments' goals is yet to be determined. The researcher hopes to provide a valuable analysis of this process of change in hope that it will aid the retail pharmacy sector to better adapt and cope with these changes.

#### 1.9.Chapter Outline

Chapter 1 – Overview: This chapter introduces the reader to the background, rationale, objectives, limitations as well as the way in which the study has been designed.

Chapter 2 – Literature Review: This chapter describes the background of the industry from the different players perspective. It goes on to investigate consumer behaviour, opinion leadership and source characteristics in the retail pharmacy sector.

Chapter 3 – Research Methodology: This chapter covers the methods used to conduct the study as well as the sampling size and technique used. Methods and techniques of data collection and analysis are also covered in this chapter.

Chapter 4 – Research Findings: This chapter contains the results of the research. This includes the statistical and data interpretation. Results are graphically displayed. Furthermore, comparisons between different data have been examined.

Chapter 5 – Research Conclusions and Recommendations: Upon analysing the data, the hypothesis is re-evaluated and conclusions are drawn based on the findings of the study. General recommendations for further studies in this area are made.

## Chapter 2

## 2.1. Background

#### 2.1.1. New Clicks

New Clicks Holdings has teamed up with several pharmacists to create a new R750 million flagship pharmacy group in South Africa. Purchase Milton & Associates (PM&A), owned by the pharmacists has been registered and is in the process of acquiring well-known pharmacies and groups of pharmacies to be funded via loans totalling about R355 million from New Clicks. The R355 million lent to Purchase Milton & Associates were market-related and secured by way of notarial bonds and other securities. Amendments to legislation allowing non-pharmacist ownership would result in New Clicks becoming the owner of pharmacies, subject to certain conditions. (SAPA, April 2003). New Clicks charged PM&A R45.5 million interest in the last financial year. PM&A has incurred losses in the integration and consolidation phase of its business but Trevor Honneysett, group leader of New Clicks Holdings, believes that having reviewed PM&A's strategies and business plans, New Clicks is confident that the full amount of the loan will be repaid. (New Clicks Holdings Limited, August 2002)

#### http://www.newclicks.co.za/news/archive/strong growth 31 08.html

New Clicks increased its stake in the Link Investment Trust to 56% for an undisclosed amount leaving only themselves and the franchisees as owners of the business. They have obtained permission from the Pharmacy Council to provide services for a market related fee through the Link franchisees to determine ways it could add value to the pharmacies' operations. New Clicks would provide certain inputs to the pharmacies, including:

- Assistance with marketing, advertising, promotions and point-of-sale
- Establishment and development of an integrated IT platform
- Coordination and centralisation of purchases
- Wholesale and related logistical services
- Sponsorship of training programmes
- Funding (SAPA, April 2003)<a href="http://new.hst.org.za/news/index.php/20010418/">http://new.hst.org.za/news/index.php/20010418/</a>

New Clicks spent R281 million on the acquisition of United Pharmaceutical Distributors (UPD) on 1 January 2003. This, being the cornerstone of their future healthcare strategy would add major opportunities for synergies in the supply chain. This enhances their specialised pharmaceutical distribution capabilities where factors such as expiry dates, cold storage, twice-daily deliveries, security and product handling are paramount. UPD distribute products to 5200 pharmacies, doctors and hospitals in Southern Africa. The acquisition enhances the potential to grow and develop the Link franchise further. Honneysett says that the acquisition is not one of vertical integration. New Clicks top management is committed to a long-term relationship and are tremendously excited about the strategic and advisory input the UPD management will contribute to their healthcare business. UPD's management team shares New Clicks' vision for healthcare in South Africa. Pharmacists play a vital role in bringing healthcare to consumers, yet they face enormous pressure on their margins and profitability as a result of structural changes in the pharmaceutical industry, and the emergence of different forms of service providers such as mail orders and online dispensaries. The independent retail pharmacist is an extremely valuable customer to UPD and, as such, one of UPD's primary strategies is to equip these independent retailers to meet the new challenges and threats that have changed and will continue to change the healthcare environment. (New Clicks Holdings Limited, July 2002)

## http://www.newclicks.co.za/news/archive/Pharmaceutica 16 07.html

Purchase Milton & Associates was in the process of acquiring pharmacy groups such as Hyperpharm (17 stores), Gaurdian (6 stores), Galleria (3 stores), Pharmarama (12 stores) and several other well-known independent pharmacies throughout South Africa. Trevor Honneysett, hopes the group acquires 60 or more stores under its umbrella over the next 12 months.

New Clicks vision was for a network of pharmacies offering high levels of service, counselling and lower prices. The long-term impact on its new healthcare division on the earnings of the group would be substantial. The access to capital and training provided by corporate involvement in the pharmacy industry would create huge scope for economic empowerment and ownership or co-ownership of pharmacies by aspirant pharmacists from previously disadvantaged backgrounds. Efficiencies in the

total supply-chain through the existing large New Clicks' infrastructure would benefit retail pharmacies and suppliers, and combined with the ability to purchase medication in bulk for a large number of outlets would result in lower prices to the consumer. (SAPA, April 2003)

## http://new.hst.org.za/news/index.php/20010418/

The group's multipronged healthcare strategy is a major vehicle for future growth, positioning it to take advantage of the weld of both geographies. Priceline<sup>®</sup> Pharmacy was launched in September 2002 taking healthcare activities to the transnational level. They plan to secure up to twenty franchised Priceline<sup>®</sup> pharmacies in the coming year. New Clicks believes that with the cooperation of corporate and independent retail pharmacists they can assist the government in implementing its National Drug and Health Policy including, but not limited to, in re-establishment of affordability and accessibility of pharmaceutical products and services. The group believes that this is a key in facilitating meaningful corporate participation in pharmacy in South Africa to the benefit of all stakeholders of the South African healthcare industry including pharmacists and the South African population in general. Honneysett believes that the depth of management is critical to managing the complexities of the rapidly growing organisation and excellent performance across the group is achieved by leadership capacity and management skills that allows maximum focus on brand development of a shared services platform. (New Clicks Holdings Limited, August 2002)

### http://www.newclicks.co.za/news/archive/strong\_growth\_31\_08.html

New Clicks has the advantage of first mover status – the group is light years ahead of its competitors in preparing for the advent of corporate ownership of pharmacies. Some analysts feel that New Clicks is so far ahead that Shoprite and Pick 'n Pay will never catch up. (Jones, 2003)

#### 2.1.2. Pick n' Pay

The HealthPharm business model differs from that of New Clicks in that it is a straight-forward franchise operation which uses the buying power of Pick 'n Pay to purchase products, and sells retail expertise to franchise members. Pharmacists are anxious about the effects of the involvement of big business in the community pharmacy market. (New Clicks Holdings Limited, July 2002)

## http://www.newclicks.co.za/news/archive/Pharmaceutica\_16\_07.html

#### 2.1.3. Pharmacists View

In Britain, the proportion of pharmacies in chains of five or more have increased from a third to a half in the past decade. The implication of the burgeoning "corporatisation" of pharmacies is cause for concern for consumers, pharmacists and practice researchers alike. Large corporations maximise profit by ruthlessly rationalising and standardising products and services. Within pharmacies this is achieved by imposing routines on processes such as dispensing, by standardising product services and store design, by ensuring employees undertake simple tasks, follow written procedures and use computer technology where possible. Pharmacists, as health professionals with unique skills and knowledge, sit awkwardly with this relentless rationalisation and standardisation and the opportunities for them to exercise independent professional judgement are reduced, as they are required to comply with approved protocols and "company policy". (Taylor, 2003)

Corporate strategies pursuing rationalised economies of scale pose a considerable threat to the idea of pharmacists as professionals, deskilling them and threatening their traditional entitlement to privileged occupational status, remuneration and autonomous action. Imposition of routines is now so endemic within pharmacy that, although the dispensing of prescribed medicines is the pharmacists' major activity and the basis for the majority of independent community pharmacists' income, "practical" and even supervisory aspects of dispensing are now considered codifiable, technical activities, and therefore the province of technicians, not pharmacist. Yet, imposition of routines in dispensing undoubtedly creates opportunities for pharmacists to develop and extend their professional activities. (Taylor, 2003)

Pharmaceutical care and medicines management initiatives and policies have sought to promote pharmacists' activities beyond dispensing to a sector of pharmacy with two counterpoised approaches to service delivery. This creates tension with the other players where profit maximisation by economies of scale, and rationalisation versus profit maximisation primarily by service delivery. Corporate pharmacy results in change and development only taking place with the explicit support of corporate bodies. Corporate pharmacies pursue an agenda that is ultimately driven by maximisation of profit, rather than professional service development. This risks the Pharmaceutical Society being seen as ineffectual and ultimately irrelevant. (Taylor, 2003)

Corporate pharmacies undoubtedly represent a major threat to the livelihood of many independent community pharmacists. Any move to free entry controls may not be in the public interest. Change within the community pharmacy sector is increasingly being driven by the commercial interest of the corporate sector. Ultimately, researchers and policy makers must consider whether practice within community pharmacy per se can be influenced or changed by research evidence, if any proposed change is not supported by those determining the strategic development of corporate pharmacies. The question then arises as to whether future developments in community pharmacy services will be triggered by evidence or commercial expediency. (Taylor, 2003)

#### 2.1.4. Government View

In the United Kingdom, the President of the Royal Pharmaceutical Society, Marshall Davies, stated that, "deregulation may not be in the public interest because the needs of the patients and National Health Service had to be taken into account as well as the needs of the consumers." The change in regulations to allow open ownership of pharmacies had an immediate impact and pharmacy numbers fell in the following two years. (Buisson, 2003)

The structure of their market has changed in that national pharmacy chains and supermarkets have significantly increased their market share. The Office of Fair Trading stated that the structure of the market has changed in that national pharmacy

chains and supermarkets have significantly increased their market share. They feel that the effect of regulation has been to constrain this change and, in particular, to impede the expansion of groups that offer lower prices, more convenient opening times or valued and innovative services. Also, they feel that the new legislation will prevent leapfrogging, whereby contractors would move premises in order to gain what was seen as the most desirable location to increase footfall and prescription numbers. This generally led to pharmacies clustering around medical practices. The control of entry regulations stopped this by introducing a distance criterion to the decision as to whether a new pharmacy contract should be granted. In effect, it encouraged would-be contractors to look for sites that were away from existing pharmacies, not close to them. (Buisson, 2003)

Hence, deregulation would allow pharmacies to locate in areas where consumers value them to the greatest extent, as consumers would have greater access to pharmaceutical services. A survey conducted by the Office of Fair Trading found that, pharmacy users were "creatures of habit" with 94 per cent saying that they had the "usual chemist" and 88 per cent saying that they had used it the last time they had a prescription dispensed. This survey also revealed that the most important factors in choosing the usual pharmacy were locality (57 per cent) and convenience (29 per cent). 91 per cent of respondents agreed that convenience of location was important to them. More than half (55 per cent) said that their usual pharmacy was in a local parade of shops, 35 per cent in a high street or shopping centre in town, 5 per cent in an out-of-town shopping centre and 5 per cent in another location. (Buisson, 2003)

By demanding that each pharmacy be licensed, the department can restrict the number of entrants into the market, particularly where the market is already adequately serviced in a specific geographical area. If licensing is not required, it would essentially see a free-for-all in the market, allowing New Clicks and its' competitors to open many pharmacies in as many stores as they can handle. (Jones, 2003)

#### 2.2 Consumer Behaviour

It is essential for pharmacists to understand the elements of consumer behaviour such that he or she can position himself or herself for successful market exchanges. A consumers' motivation reflects:

- 1. Goal-directed arousal that ultimately results in goal-relevant behaviours.
- 2. Elaborated information processing.
- 3. Making decisions about things that the consumer views as important and self-relevant.

Consumer behaviour is the totality of consumers' decisions with respect to the acquisition, consumption and disposition of products, services, time, and ideas by (human) decision-making units over time. (Hoyer, 2001)

Consumer behaviour encompasses four domains:

- The psychological core
- The process of decision making
- The consumer's culture
- The consumers behaviour outcomes

The psychological core is the source of knowledge or information on which consumers base their decisions. Motivation, ability and opportunity to make acquisition, usage or disposition decisions are key factors that affect whether consumers will pay attention to and perceive information, what information they notice, how they form attitudes, and what they remember. These factors also affect how much effort consumers put into searching for information, how they make choices, and how they judge whether their experience is satisfactory. Motivation is defined as "an inner state of arousal," with aroused energy directed to achieving a goal. The motivated consumer is energized, ready, and willing to engage in a goal-relevant activity. Consumers can be motivated to engage in behaviours', make decisions, or process information, and this motivation can be seen in the context of acquiring, using, or disposing of an offering. High motivation leads to consumers willing to expend both time and energy engaging in behaviour relevant to their goals.

Also, in high motivation states, consumers are more likely to pay careful attention to the goal, think about it, attempt to understand or comprehend information presented about it, evaluate it critically, and try to remember the information so that it can be used later. Lower motivation states results in consumers devoting little effort to processing information and making decisions and thus engaging in various decision-making shortcuts. (Hoyer, 2001)

Motivation evokes a psychological experience in consumers called felt involvement involving states of interest, excitement, anxiety, passion and engagement and consist of:

- Enduring Involvement- showing interest in an offering over a long period of time. While a consumer may express enduring involvement in any object or activity, for most consumers, enduring involvement occurs for relatively few offerings or activities
- **Situational Involvement** involvement is only high when the consumer is trying to achieve the goal. Goal achievement may result in dramatic decline in involvement
- Cognitive Involvement- the consumer is interested in thinking about and processing information related to his or her goal. The goal therefore includes learning about the offering
- Affective Involvement- the consumer is willing to expend emotional energy
  or has heightened feelings about an offering or activity.

Consumers can be involved in many different entities; hence the objects of involvement must be investigated when referring to the type of involvement:

Brand Loyalty- Cognitive and/or affective involvement with a brand. Brand
loyal consumers are consistent purchasers of the brand, hold strong beliefs
about its quality, feel considerable devotion toward it, and often resist
competitors' efforts to attract them. Pharmacists must recognize consumers'
ownership of specific brands and ensure they have adequate stocks of their
consumers' brands and help consumers with the transition to new brands if
their old favourites are discontinued

- Product Categories- Consumers may exhibit cognitive and/or affective involvement in a certain product category. Involvement may also be a pastime or activity
- Advertisements- Consumers motivation to attend and process information from an advertisement is heightened if the message is relevant to them or if they are involved in the advertisement
- Medium- Consumers can also be involved in the medium in which the advertisement is placed. Pharmacists use print media such as magazines and newspapers as they are considered to generate higher levels of involvement because the reader must interact with these media. The Link® Pharmacy chain regularly advertises on television even though it is regarded as a low-involvement medium because viewers are typically passive and do not have to think much to process what they see. The danger of this type of advertising is that advertisements are displayed during popular television shows and higher level of program involvement can sometimes lower advertisement involvement

Response involvement is the degree of involvement that the consumer experiences in using the product. A high degree of involvement will stimulate a consumer to purchase, as they will enjoy the purchasing experience. Pharmacists must try to involve the consumer as much as possible in the purchasing process and usage of the product to stimulate a higher degree of response involvement. (Hoyer, 2001)

Motivation is higher if the advertisement, brand or product category is personally relevant and important to the consumer. This exists when the above are:

- Consistent with consumers' values, goals and needs
- Risky
- Moderately inconsistent with their prior attitudes.

Personal relevance is the extent to which an advertisement, brand or product has a direct bearing with significant consequences or implications on a consumer life. These become even more personally relevant if they bear on a consumers' self-concept. Pharmacists must understand that the consumers' self-concept helps to define them and thus guides their purchasing behaviour, as owning these products is important to their self-definition. By offering personally relevant products and services to consumers, pharmacists can motivate consumers' behaviour; encourage information processing and effortful decision-making. Pharmacists must explore consumers' underlying reasons for a purchase and tailor sales pitches to those reasons. Advertisements must be geared towards consumers' special concerns e.g. the Link® advertisement displays the pharmacist mountain climbing next to the consumer giving him advice when he or she starts to feel ill. This message is effectively transmitted to the consumer with their slogan "Ask your Link® Pharmacist". (Hoyer, 2001)

Values are beliefs that guide what consumers regard as important or good. Pharmacists can motivate consumers by feeding them information that is relevant to their values enhancing the chance of them attending to and processing the information. Goals are objectives that consumers would like to achieve. They are specific to a given behaviour or action and are often determined by the situation at hand. Goals affect personal relevance and motivation and pharmacists can increase consumer satisfaction by showing consumers how their goals can be achieved through their interaction with them. (Hoyer, 2001)

Consumers' needs also affect personal relevance and motivation. Consumers are satisfied when their needs are in a state of equilibrium. Non-equilibrium causes tension that produces arousal in the consumer and motivates the consumer to act in a manner to fulfil the need. Pharmacists must identify consumers' needs and help consumers reduce their tension thus motivating them to direct their behaviour towards a mutually desired outcome. Abraham Maslow grouped needs into five categories or levels of descending importance:

- Physiological- Consumers are vulnerable to healthcare professionals as Maslow regards this need as the having the highest order. While this may be advantageous to pharmacists, it becomes even more imperative that pharmacists satisfy this physiological need for excellent health. Consumers have varied levels of satisfaction dependent on the requirements of their bodies as demanded by their lifestyles. Pharmacists must be able to differentiate between these consumers and be able to satisfy a varied level of needs
- Safety- Consumers' need for protection and security is enhanced when a
  professional pharmacist is needed to help the consumer defend himself or
  herself from microorganisms which he or she is not familiar with. Pharmacists
  aid consumers in maintaining their required level of protection by giving them
  advice on healthcare, nutrition, lifestyle and behavioural habits
- Social and Egoistic- Satisfying consumers' needs for affection, friendship and acceptance involves their physical appearance and health status. Pharmacists are key role players as they are the final professionals that the consumer interacts with in the healthcare process. Thus, pharmacists' views and opinions are viewed in high regard by consumers and directly affect a consumers' sense of self-esteem and thus their ability to interact in society to satisfy their social needs. Certain pharmacies are perceived to be associated with a higher quality of healthcare due to geographical location satisfying a need for prestige. Pharmacists must ensure that irrespective of their geographical location and quality of the brand that they are selling, consumers perceive that they are purchasing the best. If this is not achieved in the purchasing process there is a high chance of post-purchasing dissonance occurring

• Self-Actualisation- Consumers' needs for self-fulfilment and enriching experiences must be satisfied by pharmacists. Pharmacists can achieve this by enhancing the purchasing experience for the consumer by offering a truly unique experience. The pharmacists' skill and expertise is the value added product that can achieve satisfaction of these needs. (Hoyer, 2001)

Maslow's hierarchy has been accused of being simplistic because needs are not always ordered in that manner, ignores the intensity of needs and its effects on motivation. Some consumers are extremely cautious about their health and readily seek treatment for ailments whereas others are reluctant to seek medical assistance and only seek the advice of a pharmacist when the aliment interferes with their ability to achieve satisfaction of other needs. South Africa comprises of a diversity of cultures and the hierarchy varies dependent on cultures.

Needs are classified as functional, symbolic or hedonic. Social needs are externally directed and relate to other individuals. Functional needs motivate consumers to search for products that solve consumption related problems. The presence or action of the pharmacist can fulfil these functional needs by relieving consumers of their burdens or displaying role-model behaviour. Symbolic needs relate to how consumers perceive themselves, how they are perceived by others, how they relate to others and the esteem that they are held by others. Consumers need to avoid rejection, the need for self-esteem, status, affiliation, and belonging can be achieved by purchasing products that are exclusively sold in pharmacies and have the pharmacists' seal of approval. Hedonic needs relate to sensory pleasure that consumers experience in the pharmacy. Pharmacies and their products must satisfy non-social hedonic needs for sensory stimulation, cognitive stimulation and novelty. (Hoyer, 2001)

Consumers with a high need for cognition and optimum stimulation levels of sensory information are more likely to process information during decision-making. They tend to be involved in shopping and seek information about brands and pharmacists must ensure that these consumers are provided with enough stimulation and information to satisfy their needs. However, pharmacists must be careful not to over stimulate consumers, as sometimes consumers want to get away from people, noise and demands. The clinical atmosphere of the retail pharmacy is thus essential to offer a tranquil environment for these consumers to make their purchases. (Hoyer, 2001)

Pharmacists must be aware that needs are dynamic, satisfaction of a need results in emergence of another need. Pharmacists have a comparative advantage of developing close relationships with their consumers as compared to the average retailer due to their professional status and must exploit this by not only satisfying the needs of their consumers but also predicting the emerging needs of consumers. This will allow pharmacists to position themselves and their organization in an optimal position to satisfy future needs. Finally, conflict of needs can occur because satisfaction of one need may lead to dissatisfaction of another. Consumers experience approachavoidance conflict when they purchase items from a pharmacy that may satisfy their need for value-added service but not their need for the cheapest product in the range due to the pharmacist maintaining quality products of an acceptable pharmaceutical grade. The approach-approach conflict is increasing in retail pharmacies. Approachapproach conflict occurs when a consumer must choose between two or more equally desirable options that fulfil different needs. Consumers are now faced with the opportunity to purchase generic brands of medicinal products. Generic equivalents have been proven to have a biopharmaceutical equivalent therapeutic effect and thus pharmacists are now legally required to offer the consumer the generic brand. The pharmacist role of rational drug use is vital in aiding the consumer in making the best decision for him or herself. He or she must help the consumer achieve the desired therapeutic effect at the lowest cost. Avoidance-avoidance conflict of needs often occurs when a consumer is diagnosed with a chronic condition that will require lifelong treatment. The consumer is not satisfied with having to take medication daily and having the monthly financial commitment. Pharmacists have a vital role in helping consumers accept their needs so that the conflict experienced by the consumer is reduced. (Hoyer, 2001)

Perceived risk is the extent to which the consumer is uncertain about the consequences of buying, using or disposing of an offering. Perceived risk is higher under the following conditions:

- Little information is available about the product offering. Pharmacists have a responsibility to keep themselves informed and updated on the latest drug therapy so that they can inform their consumers on the risks and benefits of using new products. This will help reduce the perceived risk of the consumer
- The offering is new. New medication especially experimental drugs often increase the perceived risk experienced by the patient. Pharmacists can reduce this perceived risk by keeping consumers informed of successful clinical trails conducted elsewhere in the world and monitoring patients taking similar drugs for common side-effects and adverse reactions
- The offering has a high price and is technologically complex. Pharmacists can increase the convenience to consumers by offering them account services, direct submissions to medical aids and cheaper generic substitutes. The perceived risks of purchasing products from a pharmacy are thus reduced. Often consumers are faced with complex drug regimes when diagnosed with several chronic conditions e.g. hypertension, diabetes and hypercholestrolanemia
- The consumer has little confidence or experience in evaluating the offering. Consumers rely on the opinions, skills and expertise of pharmacists with respect to the prescribed drug and conjunctive treatment. Pharmacists must take the time to help the patient understand both his or her medical condition and his or her treatment so that he or she can make the best-informed decision for his or her healthcare

Pharmacists have both an ethical and legal responsibility to enhance consumers' understanding of how their own behaviour can create risky negative outcomes. Pharmacists may need to enhance consumers risk perceptions in consumers who do not see a particular action as risky, when in fact it is e.g. having unprotected sex with multiple partners. (Hoyer, 2001)

## 2.3. Opinion Leadership

Opinion leaders are individuals in a reference group who influence the attitudes of others. Pharmacists are regarded as opinion leaders in society as they often possess outstanding achievement records, are very knowledgeable and possess a high level of interest in certain aspects. Opinion leaders motivate individuals to "adopt certain selfimages and lifestyles patterns". Pharmacists' ability to motivate consumers to alter behavioural patterns as part of their treatment is highly dependent on the degree to which pharmacists are regarded as opinion leaders. Success in the treatment of hyperlipidaemia is partly dependent on the patient changing their diet by consuming low fat foods. The patients' opinion of the pharmacist will contribute to whether he or she will take the advice given to alter his or her diet. Opinion leaders serve as gobetweens for marketers- channelling the flow of information from the mass media to individual buyers, thus playing an important role in promoting new and high-risk products. This is essential in South Africa as advertising of ethical products is illegal. Advertisements for ethical drugs e.g. Viagra® and Xyban® simply tell consumers that there is a new effective treatment for erectile dysfunction or quitting smoking and refers the consumer to the doctor or pharmacist for more information.

Opinion leadership is an informal, verbal, normally face-to-face phenomenon, which is normally very inconspicuous. The Medicines and Related Substances Act of 1965, previously allowed manufactures to persuade opinion leaders, that is, doctors and pharmacists to 'experience the benefits of their products' by offering them free samples and bonuses when placing large orders. This creates opinion leaders by increasing their desire for that product. However, recent changes in legislation doesn't permit this, thus the role of the pharmacist as an opinion leader has become even more

important in terms of his or her impact on the consumer. The pharmacists' role as an opinion leader is exploited by advertisements that ask the consumer to speak to their pharmacist. This association of the product with the pharmacist enhances the quality of the product as it implies that the product will have the pharmacist seal of approval. Marketers often use opinion leaders to endorse their products as consumers evaluate the advertisement more favourably and thus these advertisements were more effective in getting the consumer to buy the product. Opinion leaders are used through group sanctioning or referrals e.g. "Panado®, the GP's choice".

Opinion leaders as informal communication sources effectively persuade consumers in their product-related decisions because of their credibility, positive and negative product information. Pharmacists play a vital role in helping consumers decide between brands. Their values, attitudes and beliefs are mainly guided by their experience of the clinical effectiveness of a product in usage in time. (Kolb, 2001)

#### 2.4. Source Characteristics

A source is defined as an individual or character that delivers a message. Source characteristics are the features that impact the effectiveness of the source, that is;

#### 2.4.1. Creditability

Refers to the perception of the degree of a source's credence, based on the perception of the expertise and trustworthiness of the source. Thus the greater the amount of expertise and trustworthiness that a pharmacist has, the more likely the consumer will perceive the pharmacist as credible. The creditability of the pharmacist has a large impact on consumer behaviour. Source expertise refers to the extent of knowledge the pharmacist is perceived to have about the subject on which he or she is communicating. Pharmacists are recognised by society after the attainment of a four-year degree and two years of in-service training. Pharmacists must continue to update themselves on the latest medical updates so that they can better inform their patients of more modern alternative therapies.

Source trustworthiness refers to the extent that the pharmacists' provides information in an unbiased, honest manner<sup>n1</sup>. Source expertise has the greatest impact on consumer's reactions to communication. Source expertise and trustworthiness make an independent contribution to source effectiveness. Thus, if a pharmacist is perceived to be trustworthy, he or she can influence consumers, even if perceived to have relatively little expertise. This is supported by the increasing popularity of university degree attainment and societies respect for such professionals. Similarly, even though a pharmacist may be perceived to be untrustworthy, if perceived to be an expert, he or she will have persuasive ability<sup>n2</sup>.

Trust is influenced by the attributions made for the cause of the endorsements. When advertising, pharmacists must ensure that the endorser is not perceived as presenting a message because of his or her or her own self-interest. This will result in trust being substantially lowered. Thus, risks are run if pharmacists are seen to be motivated primarily because they are paid rather than because they genuinely care about their consumers. This may occur in the case where pharmacies have a pharmacist as an employer as compared to the pharmacist owning the pharmacy. Pharmacists reduce counter argumentation developed by the consumers' cognitive responses to advertising. When a highly trustworthy and expert endorser such as a pharmacist is used, people lower their defences and produce fewer cognitive responses. In summary, pharmacists are highly credible sources and thus may be more persuasive due to their ability to:

- > Produce more positive attitude change toward the position advocated
- > Induce more behavioural change than less credible sources
- ➤ Enhance the ability to use fear appeals, which involve physical or social threats
- ➤ Inhibit the creation of counter arguments to the message.<sup>n3</sup>

#### 2.4.2. Physical Attractiveness

Researchers have found that physically attractive communicators are more successful than unattractive ones in changing beliefs<sup>n4</sup>. Consumers tend to form more positive stereotypes about physically attractive people. The white coat worn by pharmacists is not only a sign of professionalism reflecting clinical cleanliness but also good values such as pureness and honesty. Also, researchers have found that attractive individuals

are perceived more positively and reflect more favourably on the brand endorsed<sup>n5</sup>. This is an important effect in the retail pharmacy environment for the pharmacist to add value to the products that are sold to consumers.

The match-up effect states that endorsers are more effective in changing attitudes, beliefs and intentions when the dominant characteristics of the product match the dominant features of a source. Thus the sale of pharmaceutical products is enhanced by a clinical source 'fitting' the product, that is, a pharmacist. Researchers have also found that matching source and brand is particularly important when consumers are in a high-involvement state<sup>n6</sup>. Consumers are often in a high-involvement state in dealing with matters of their physiological state hence, pharmacists must ensure the match between brand and themselves is as closely fit as possible. The benefit of matching the pharmacist to the product is that it leads to increased persistence in the attitudes that are formed as a result of the association<sup>n7</sup>.

#### 2.4.3. Likeability

Refers to the positive or negative feelings that consumers have towards a pharmacist. Likeability is increased when the pharmacist behaves in a way that matches the desires of those who observe him or her. In addition, likeability increases when a pharmacist says pleasant things<sup>n8</sup>. Finally a pharmacist may be likeable because he or she acts in ways or exposes beliefs that are similar to that of the consumers.

#### 2.4.4. Meaningfulness

Pharmacists provide meanings to consumers. As a result of the connection between the pharmacist and the brand, such meanings can then be transferred. The transfer of meaning from a pharmacist to a product to a consumer is diagrammed below. The figure presents a flow chart in which a pharmacist plays a number of roles over his or her career. Based on these roles, meanings become attached to the pharmacists that are shared within a culture.

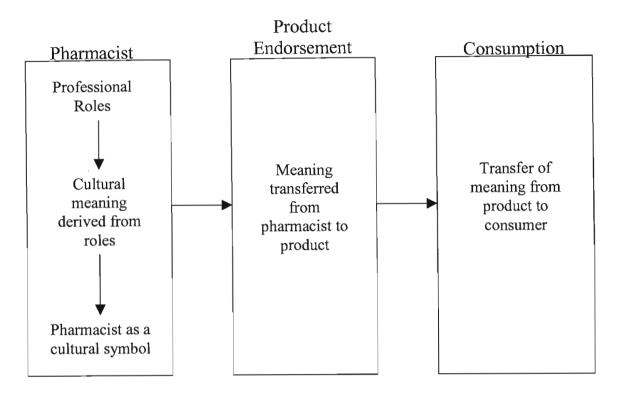


Figure 1: The transfer of meaning from a pharmacist to product to consumer

In summary, pharmacists are cultural symbols. When a pharmacist endorses a product in an advertisement, associations are formed so that the culturally derived meanings may be transferred to the product. In the consumption phase the meaning may then be transferred from the product to the consumer. Thus when the consumer uses a pharmaceutical product, some of the qualities of the pharmacist may become symbolically attached. (Mowen, 2001)

#### Notes:

Not all researchers define trust in the manner described here. In some cases
trust has been defined as including expertise within its bounds. That is, trust is
defined in the same manner as I have defined credibility. See, for example,
Christine Moorman, Rohit Deshpande, and Gerald Zaltman. January 1993.
'Factors Affecting Trust in Market Research Relationships'. Journal of
Marketing. No. 57. pp 81-101.

- 2. Josh Wiener and John C. Mowen. Spring 1985. 'The impact of product recalls on consumer perception'. *Mobius: The Journal of the Society of Consumer Affairs Professionals in Business.* pp 18-21.
- 3. Brian Sternthal, Lynn Phillips and Ruby Dholakia. Fall 1978. 'The Persuasive Effect of Source Credibility: A Situational Analysis'. *Public Opinion Quarterly*. No. 42. pp 285-314.
- 4. Shelly Chaiken. August 1979. 'Communicator Physical Attractiveness and Persuasion'. *Journal of Personality and Social Psychology*. No. 37. pp 285-314.
- 5. Kathleen Debevec and Jerome Kernan. 1984. 'More Evidence on the Effects of Presenter's Physical Attractiveness: Some Cognitive, Affective and Behavioural Consequences'. Advances in Consumer Research. No. 11. pp 127-132.
- 6. Amma Kirmani and Baba Shiv. 1998. 'Effects of Source Congruity on Brand Attitudes and Beliefs: The Moderating Role of Issue-Relevant Elaboration'. *Journal of Consumer Psychology* 7. No. 1. pp 25-47.
- 7. Jaideep Sengupta, Ronald C. Goodstein and David S. Boninger. March 1997. 'All Cues Are Not Created Equal: Obtaining Attitude Persistence under Low-Involvement Conditions'. Journal of Consumer Research. No 23. pp 351-361.
- 8. Jean-Charles Chebat, Micheal Laroche, Daisy Baddoura and Pierre Filiatrault.1993. 'Effects of Source Likeability on Attitude Change through Message Repetition'. Advances in Consumer Research. No. 20. pp 353-358.

## Chapter 3

## 3. Research Methodology

#### 3.1 Sampling and Method

The study uses a non-probability convenience sampling due to the nature of the research. While non-probability samples are easier to draw, the researcher recognises that such samples give no basis for evaluating the size of the sampling variation and the error of estimation (P. Ghauri, 1995). The convenience sampling technique also satisfactorily meets the sampling objectives. Simple random sampling is the simplest design for drawing sample and is easy to understand and apply. However, the researcher recognises the drawback that a complete framework is needed.

(P. Ghauri, 1995)

By concentrating the geographical area of study, the researcher reduced both the cost and the variability of the sample. Questionnaires were formulated to survey the respondents and pharmacists. Descriptive questionnaires were used to understand consumers purchasing behaviour when purchasing pharmaceutical products. The questionnaire contains demographic, ranking and yes-no type questions. Descriptive questionnaires allows for large amounts of information to be gathered at a rapid rate.

For the purpose of this study, three pharmacies were selected and 150 questionnaires were distributed to consumers. This yielded a sample size of 113 consumer respondents equivalent to a 75% response rate. One hundred percent of the pharmacists responded. Since this percentage is more than a third of the sample, it is regarded as a high response rate. (P. Ghauri, 1995) None of the questionnaires had to be excluded. Some consumer questionnaires were completed at the selected pharmacies while some consumer questionnaires were taken away and returned to the respective pharmacy.

#### 3.1. Procedure

The consumer questionnaires were distributed to consumers visiting the pharmacies over a three-week period. Permission from the pharmacist concerned was sought prior to the commencement of the distribution. Consumers and pharmacists were informed that this study was part of a Masters dissertation at the University of Natal.

Consumers and pharmacists were informed that all information provided would be kept strictly confidential. They were further informed that they would not have to divulge personal information such as names, phone numbers or addresses. Lastly, they were informed that they were not obliged to fill in the questionnaires.

The questionnaires were distributed and collected with the assistance of the pharmacists and their assistants of the respective pharmacies. After a period of three weeks, the researcher returned to the pharmacies to collect both the pharmacist and consumer questionnaires. The pharmacists and their assistants reported that the respondents were very willing to complete the questionnaire and were curious about the area of the study. An adequate response rate was achieved with a representative sample obtained.

#### 3.3. Validity and Reliability Testing

Validity of a test refers to establishing whether a test measures what it supposed to measure (Cooper, 2001). The sample was drawn from pharmacies in the central district of Durban alone, which could affect the results. Moreover, consumers and pharmacists from only three pharmacies were chosen. To increase the validity of the research, consumers and pharmacists from other pharmacies as well as from other geographical locations surrounding Durban could also have been included in the sample. Therefore, the findings of the research can serve only as a guideline to consumers' pharmaceutical purchasing behaviour and their relationships with their pharmacists should be considered with caution.

Reliability on the other hand refers to obtaining similar results each time using the same measuring instrument (Cooper, 2001). Reliability also refers to the extent to which the same instrument would produce the same results with the same respondents on a different occasion. Reliability reduces the standard error of the sample and improves the confidence one would place in the results. Reliability of results was determined by majority of respondents having indicated a positive result in trusting their pharmacist.

However, since a convenience sample was used, and considering that convenience samples are not drawn by random methods, this may cause the research results to have a lower degree of external validity. However, according to Cooper and Schindler (2001), this does not imply that convenience samples are bad. They are commonly used and many results have been found to be valid and reliable.

#### 3.4. Questionnaire Analysis

The consumer questionnaire is broken up into three sections. The first section contains simple demographic questions. The first question establishes the gender of the respondent while the second question establishes the respondent's martial status. Question three establishes if the respondent has any children while question five reveals the respondents age group. The last of the demographic variables requested was the respondent's family income.

The second section evaluates the product purchasing behaviour of the respondent. The first few questions establishes the respondents frequency of visits to the pharmacy and the amount of income spent on pharmaceutical care. The focus of questioning then shifts to the services offered to the respondents and then measures their satisfaction levels of these services. The concept of 'open-ownership' of pharmacies and chainstore pharmacies are then introduced to the respondent. The researcher attempted to establish the respondents' attitude and satisfaction levels to purchasing from such pharmacies.

Section three focuses on the pharmacist-patient relationship. These questions attempt to establish if the respondent has a relationship with his or her pharmacist. The researcher also attempts to measure the level of trust that the respondent has in the pharmacist.

The questionnaire for the pharmacists was designed to test similar variables as the consumer questionnaire. These results will be compared in relation to the consumer responses in hope of revealing agreement and disagreement in the attitudes of consumers and pharmacists.

The researcher attempted to ask as many close-ended question as possible. This allows for quantitative data analysis. The questionnaire is four pages long and contains no incentives. An initial note attempts to induce the respondents and pharmacists to complete the questionnaire and explains the purpose of the research.

A copy of the questionnaires is included in the Appendix.

#### 3.5. Reporting Errors

It is difficult to completely eliminate reporting errors. However, every precaution is taken in the questionnaires to keep these errors to a minimum. A pilot study was conducted to test the effectiveness and comprehensiveness of the questionnaires.

# Chapter 4

Once both the consumers' and pharmacists' questionnaires were administered and collected, the questions were coded and the data was put into a statistical software package. The data was used to generate the following results:

### 4.1. Research Findings: Demographics

### 4.1.1. Age Distribution of Consumers

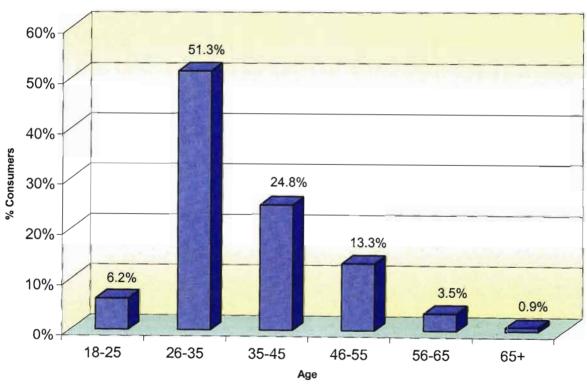


Figure 2: Age Distribution of Consumers (n=113)

Figure 2 illustrates that the sample consists of 6.2% 18-24 years old, 51.3% 26-35 years old, 24.8% 35-45 years old, 13.3% 46-55 years old, 3.5% 56-65 years old, 0.9% 65 years old and above category.

### 4.1.2. Income Distribution of Consumers

60% 50% 40% 30% 20% 13.3% 10% 10% up to 10 000 10 000 – 20 000 20000 – 30 000 more than 30 000

Figure 3: Income Distribution of Consumers (n=113)

**Monthly Gross Household Income** 

Figure 3 illustrates sample consist of 54% of the consumers' monthly gross income summing up to R10 000, 24.8% between R10 000 and R20 000, 13.3% between R20 000 and R30 000 and 8% more than R30 000.

#### 4.1.3. Medical Aid Scheme Membership of Consumers

Figure 4: Distribution of Medical Aid Scheme Membership of Consumers (n=113)

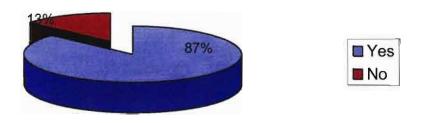


Figure 4 illustrates that the sample consists of 86.7% of the consumers are members of a medical aid scheme while 13.3% of the consumers were not members of a medical aid scheme.

# 4.2. Research Findings: Product Purchasing and Sales Behaviour

#### 4.2.1. Specific Pharmacy Usage

Figure 5: Distribution of Specific Pharmacy Usage by Consumers (n=113)



Figure 5 illustrates that the sample consists of 63.7% of the consumers always using the same pharmacy to purchase their pharmaceutical products while 36.3% of the consumers did not always use the same pharmacy to make their purchases.

#### 4.2.2. Length of Specific Pharmacy Usage

Figure 6: Distribution of Length of Similar Pharmacy
Attendance of Consumers (n=72)

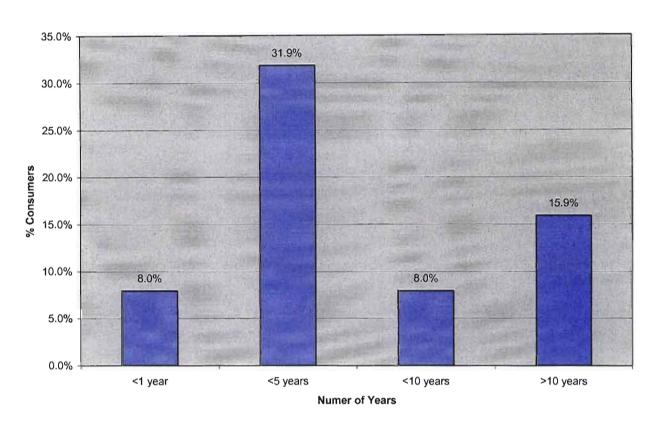


Figure 6 illustrates that of 63.7% of the sample that always purchased from a specific pharmacy, 8% of the respondents have been purchasing for a period of less than 1 year, 31.9% for a period of less than 5 years, 8% for a period of less than 10 years and 15.9% for a period of greater than 10 years.

#### 4.2.3. Services Required and Offered

Assistance in dealing with medical aids 48.7% Services Offered/Required Advice with health related problems After sales service 66.7% Personal Care eg reminders; etc **Account Facilities** 42.5% Telephonic Orders 60.2% **Delivery Service** 40% 60% 80% 100% 0% 20% % Consumers

Patient Pharmacist

Figure 7: Distribution of Services Required by Consumers vs Services Offered by Pharmacists (n=113)

Figure 7 illustrates that the sample consists of 59.3% of the consumers requiring a delivery service while 100% of the pharmacists offer this service. 60.2% of the consumers require telephonic orders while 100% of the pharmacists offer this service. 42.5% of the consumers require account facilities while 100% of the pharmacists offer this service. 31.9% of the consumers require personal care e.g. reminders while 66.7% of the pharmacists offer this service. 29.2% of the consumers require after sales service while 33.3% of the pharmacists offer this service. 71.7% of the consumers requiring advice with health related problems while 100% of the pharmacists offer this service. 48.7% of the consumers require assistance in dealing with medical aids while 100% of the pharmacists offer this service.

# 4.2.4. Satisfaction of Current Services Offered

Figure 8: Distribution of Respondents' Satisfaction of Current Services Offered (n=113)

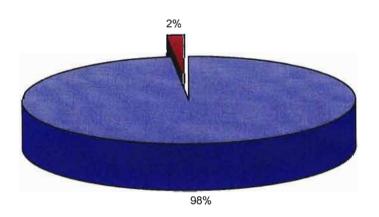




Figure 8 illustrates that the sample consists of 98.2% of the consumers that are satisfied with the current services offered while 1.2% of the consumers were unsatisfied with the current services offered.

#### 4.2.5. Casual Pharmacist Hire

The sample (n=113) consists of 100% of the sole owner pharmacists hiring part-time pharmacists.

# 4.2.6. Preference and Level of Satisfaction of Consumers with the Service of Chain Store Pharmacies

70.8% Q20 29.2% **Question Number** Q19 46.9% 53.1% 32.7% 67.3% Q18 58.4% Q17 41.6% 60.0% 80.0% 100.0% 40.0% 0.0% 20.0% % Consumers

■ Yes □ No

Figure 9: Distribution of Preference and Level of Satisfaction of Chain Store Pharmacies (n=113)

Figure 9 illustrates that the sample consists of 41.6% of the consumers preferring to purchase their pharmaceutical products from chain store pharmacies while 58.4% of the consumers prefer purchasing from pharmacists' owned pharmacies. This is supported by 67.3% of the sample stating that the quality of the service and care from such pharmacies is inadequate while 32.7% of the consumers stated that the quality of the service and care from such pharmacies is adequate. Thus, 29.2% of the consumers of the sample are comfortable purchasing their pharmaceutical products from a pharmacy not owned by a pharmacists while 70.8% of the consumers of the sample are not comfortable purchasing their products from a pharmacy not owned by a pharmacist.

# 4.2.7. Consumer Satisfaction of Service Offered by Casual Pharmacists

Figure 10: Distribution of Sole Pharmacv Owner Satisfaction with Pharmacists (n=3)

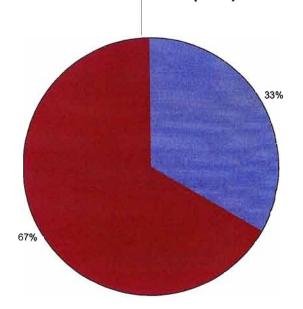


Figure 10 illustrates that the sample (n=3) consists of 33.3% of the sole owner pharmacists that are satisfied with the service offered by casual pharmacists while, 66.6% of the sole owner pharmacists were not satisfied with the services offered by casual pharmacists.

# 4.2. Research Findings: Pharmacist-Patient Relationship

While both questionnaires were evaluated, only those results that yielded statistically significant differences are discussed, that is, when p<0.05.

#### 4.3.1. Importance of Patient-Pharmacist Relationship in Treatment

The sample consists of 100% of the sole owner pharmacists that feel that consumers regard the consumer-pharmacist relationship as an important part of their treatment.

#### 4.3.2. Consumer Purchasing Comfort in a Open Owned Pharmacy

Figure 11: Distribution of Respondents' Purchasing Comfort in an Open Ownership Pharmacy (n=113)

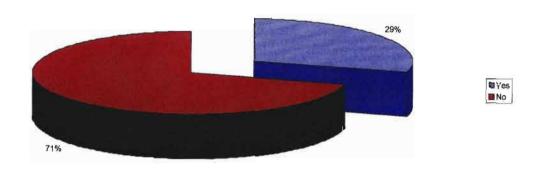


Figure 11 illustrates that the sample consists of 29.2% of the consumers are comfortable purchasing their health requirements from a pharmacy not owned by a pharmacist while 70.8% of the consumers are not comfortable purchasing their health requirements from a pharmacy not owned by a pharmacist. This result is significant at 5% level (p=0.00).

## 4.3.3. Consumer Confidence in Successful Treatment

Figure 12: Distribution of Respondents' Confidence in Successful Treatment

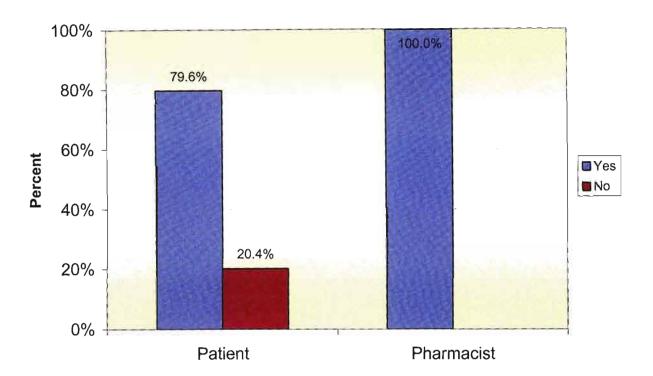


Figure 12 illustrates that 79.6% of the consumers' pharmacists instil confidence in them that their treatment will be successful while 20.4% of consumers' pharmacists do not instil confidence in them that their treatment will be successful. However, 100% of the pharmacists feel that they instil confidence in their consumers.

096960

#### 4.3.4. Consumer Compliance to Pharmaceutical Care

Table 1: Distribution of Respondents' Compliance to Pharmaceutical Care

#### Crosstab

			GR	GROUP		
			Patient	Pharmacist	Total	
	Yes	Count	81		81	
		% within GROUP	71.7%		69.8%	
1	No	Count	32	3	35	
		% within GROUP	28.3%	100.0%	30.2%	
Total		Count	113	3	116	
		% within GROUP	100.0%	100.0%	100.0%	

#### **Chi-Square Tests**

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	7.127 <sup>b</sup>	1	.008
Continuity Correction	4.131	1	.042
Likelihood Ratio	7.376	1	.007
Linear-by-Linear Association	7.066	1	.008
N of Valid Cases	116		

a. Computed only for a 2x2 table

Table 1 shows that 71.7% of the consumers always the advice given by the pharmacists whereas 100% of the pharmacists say that the consumers do not always follow the advice given. This difference is significant at a level of 5% as evident from the chi-square table (p=0.08)

b. 2 cells (50.0%) have expected count less than 5. The minimum expected count is .91.

Figure 13: Distribution of Absolute Consumer Compliance of Advice Provided by Pharmacists

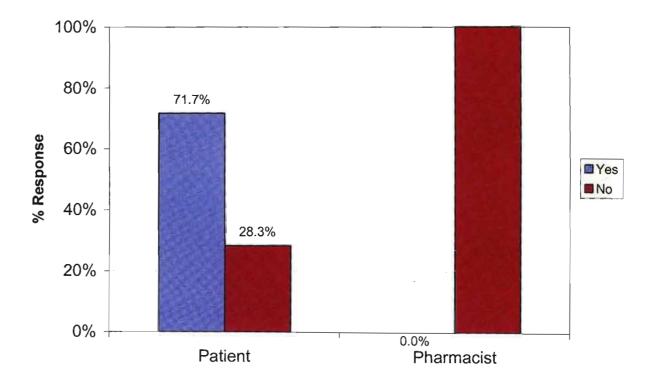


Figure 13 illustrates that there is a large difference between the number of consumers that always follow the advice given by the pharmacist and those that do not. This is supported by the above Chi-Square result.

# 4.3.5. Age Defined by Duration of Association with Pharmacist

Table 2: Distribution of Consumers' Age by Duration of Association with Pharmacist

#### Crosstab

					Age G	Group			le:
			18-25	26-35	35-45	46-55	56-65	+59	Total
	<1 year	Count	4	20	5	1			30
		% within age group	57.1%	34.5%	17.9%	6.7%			26.5%
	<5 years	Count	3	22	11	7			43
		% within age group	42.9%	37.9%	39.3%	46.7%			38.1%
	<10 years	Count		8	6	4	1		19
		% within age group		13.8%	21.4%	26.7%	25.0%		16.8%
	>10 years	Count		8	6	3	3	1	21
		% within age group		13.8%	21.4%	20.0%	75.0%	100.0%	18.6%
Total		Count	7	58	28	15	4	1	113
		% within age group	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

### Chi-Square Tests b

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	26.062 <sup>a</sup>	15	.037
Likelihood Ratio	27.333	15	.026
Linear-by-Linear Association	17.453	1	.000
N of Valid Cases	113		

a. 16 cells (66.7%) have expected count less than 5. The minimum expected count is .17.

b. GROUP = Patient

#### Table 2 illustrates that majority of:

- 18-25 year olds have known their pharmacist for <1 year
- 26-35 year olds have known their pharmacist for <5 years
- 35-45 year olds have known their pharmacist for <5 years
- 45-55 year olds have known their pharmacist for <5 years</li>
- 56-65 year olds have known their pharmacist for > 10 years
- >65 year olds have known their pharmacist for >10 years

Figure 14: Distribution of Length of Relationship between Respondents

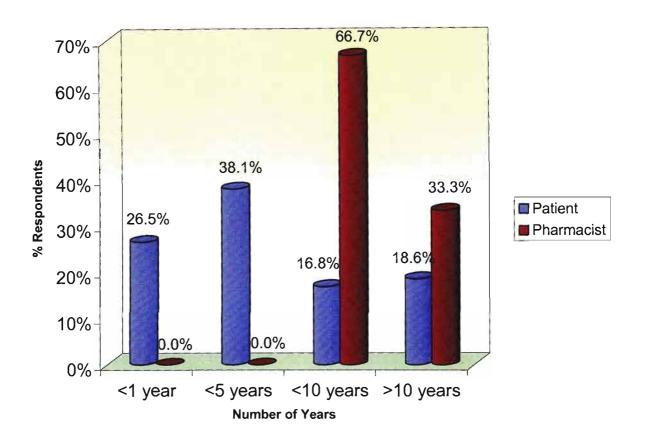


Figure 14 illustrates that while the majority of the consumers have known their pharmacist for <5 years, the majority of the pharmacists have known most of their consumers for <10 years. This difference is significant at a level of 5% as evident from the chi-square table (p=0.00).

#### 4.3.6. Pharmaceutical Service Recommendation

Table 3: Distribution of Pharmaceutical Service Recommendation

#### Crosstab

			GR		
			Patient	Pharmacist	Total
	Yes	Count	48	3	51
		% within GROUP	42.5%	100.0%	44.0%
	No	Count	65		65
		% within GROUP	57.5%		56.0%
Total		Count	113	3	116
		% within GROUP	100.0%	100.0%	100.0%

### **Chi-Square Tests**

		-	
	Value	df	р
Pearson Chi-Square	3.925 <sup>b</sup>	1	.048

- a. Computed only for a 2x2 table
- b. 2 cells (50.0%) have expected count less than 5. The minimum expected count is 1.32.

Figure 15: Distribution of Respondents' Pharmaceutical Service Recommendation

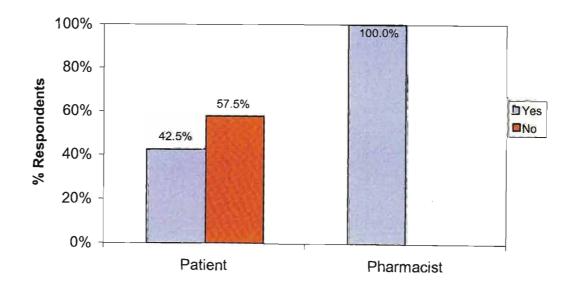


Table 3 and Figure 15 illustrates that 42.5% of the consumers were initially recommended to their pharmacist while 57,5% of the consumers were not initially recommended to their pharmacists. 100% of the pharmacists stated that their consumers recommend other consumers to them. This difference is significant at a level of 5% as evident from the chi-square table (p=0.048).

#### 4.3.7. Consumer Trust in Pharmacist

Table 4: Distribution of Consumers' Trust in Sole Owner Pharmacist

			GROUP		
			Patient	Pharmacist	Total
Consumers Trust	Yes	Count	59	3	62
in Sole Owner Pharmacist		% within GROUP	52.2%	100.0%	53.4%
T Harriacist	No	Count	54		54
		% within GROUP	47.8%		46.6%
Total		Count	113	3	116
		% within GROUP	100.0%	100.0%	100.0%

**Chi-Square Tests** 

	Value	df	Р
Pearson Chi-Square	2.682(b)	1	.101

a Computed only for a 2x2 table

Table 4 shows that 52.2% of the consumers feel comfortable asking their pharmacist for advice on a non-health related personal problem whereas 47.8% of the consumers do not feel comfortable asking their pharmacist for advice on a non-health related personal problem. However, 100% of the pharmacists state that their consumers would be comfortable asking them for advice on a non-health related problem. This difference is significant at a level of 10% as evident from the chi-square table (p=0.101).

b 2 cells (50.0%) have expected count less than 5. The minimum expected count is 1.40.

# Chapter 5

# 5. Conclusions and Recommendations

#### 5.1. Conclusion

From the empirical research, the following results were found:

Consumers tend to frequently use a specific pharmacy provided that they are satisfied with the services offered by the pharmacist and his organization. This trend occurs due to the pharmacist being constantly able to satisfy the consumers' needs. Sole owner pharmacists develop an understanding of how to motivate consumers to purchase their health requirements from their stores. They see the relationship as an essential platform to perform their professional activities. Psychologically, consumers experience various forms of felt involvement when motivated by their pharmacist. Also, consumers become interactive with objects of involvement when motivated by their pharmacists. The ability of sole owner pharmacists to elicit such states of involvement from consumers results in consumers preferring to purchase their pharmaceutical products and thus experiencing a higher level of comfort and satisfaction of their needs from sole owner pharmacies as compared to chain store pharmacies. Thus, consumers do have a relationship with their pharmacist.

Buying pharmaceutical products is often a daunting task for the consumer. Apart from the physiological concerns that exist, medication is often perceived to be a technological complex product. Thus, the consumer relies on the knowledge, skills and experience of the pharmacist in usage of the product. The pharmacist is seen as an opinion leader in medication usage whose opinion is sought most readily when the consumer faces challenges in this area. Therefore, consumers are recommended to consult sole owner pharmacists for advice in treatment. Most consumers feel that their pharmacist instils confidence in their treatment and therefore follow the advice given to them by their pharmacist. Sole owner pharmacists reduced the perceived risk experienced by consumer. This aids in more enhanced therapeutic outcomes due to positive psychosomatic effects.

Pharmacists are perceived to be a highly credible, physically attractive, likeable and meaningful source of information and are trusted by consumers who therefore follow their advice. As consumers get older they tend to have longer relationships with their pharmacists. Pharmacists and pharmacies are used in advertising and promotion of pharmaceutical products because the clinical ambiance is essential in changing consumers' attitudes, beliefs and intentions. This also helps pharmacists attain higher compliance level from their consumers due to the match-up effect. The transfer of the meaning to consumers is achieved in successful consumption of the product.

### 5.2. Implications and Limitations of Research

While open ownership pharmacies has many advantages, the researcher found the following disadvantages to this model:

Value-Added Service. Consumers often consult their pharmacist in a medical emergency. Consumers often have to obtain medical treatment but do not have the resources immediately available to attain such goals. A common example in practice is a consumer who does not have his medical aid card present with him or her in a medical emergency or a business person who has suddenly been told that they are required to make a long distance trip and not going to return for a number of months. Sole owner pharmacists regularly accommodate consumers by supplying them with the pharmaceutical care necessary without requesting immediate payment. This is often practised against standard business norms because sole owner pharmacists develop relationships with their consumers based on trust and experience. This value added service is most often recognised by the consumer and often stimulates repeat purchases. The open ownership of pharmacies will not be able to provide such services because pharmacists do not have the required autonomy and merely make decisions based on corporate policy and procedures. Such policies and procedures also prevent pharmacists from acting on his or her ethical responsibility to their profession.

- Accessibility. Consumers find it more convenient to purchase their medication from pharmacies not located in a busy shopping centre due to avoidance of long cues and difficult parking. Sole owner pharmacies have the ability to offer a delivery service that offers consumers door-to-door service personally tailored to their convenience. Open ownership of pharmacies is predicted not to offer such a service. Consumers are expected to pay extra for such luxuries and are not guaranteed of receiving their pharmaceutical product timeously and consistently. Sole owner pharmacists often ensure that all their consumers' packages are delivered at the end of a business day. This often requires that the pharmacist personally deliver the remaining deliveries at the end of his or her business day. The humility displayed by the pharmacist and his or her dedication to the satisfaction of the consumers needs is often recognised and rewarded.
- Approachability. Traditionally, pharmacists have hid behind the counter. The concept of pharmaceutical care has revolutionised this profession by taking the pharmacist from behind the counter and making him or her approachable to the consumer. A current trend in practice is the lowering of the platform of the dispensary. These changes have been introduced to make the pharmacist more accessible to the consumer. Sole owner pharmacies are guided by the concept of pharmaceutical care unlike open ownership pharmacies that are governed by efficiency and profit ratios that make it impossible for pharmacists to spend time with his patients. With the advent of cellphones, pharmacists are much more accessible to the consumer. Open ownership pharmacies hire several different part-time pharmacists in a day thus making it increasingly difficult for a patient to contact the specific pharmacist who dispensed their prescription.

- Price. The cost of healthcare is often extreme and unexpected. The consumer often finds him or herself at a disadvantage even though he or she is a member of a medical aid. Sole owner pharmacies are able to accommodate consumer needs to a greater extent than open ownership pharmacies due to the flexibility of policies and procedures. Sole owner pharmacists have the autonomy to negotiate discounts with consumers and due to their primary focus being the consumers as they are the source of the pharmacists' income. They can prevent medical aid funds from expiring by substituting generic product. This saves the consumer both time and money.
- Recognition. The relationship developed between sole owner pharmacists and their consumers often result in both parties addressing each other using their first names. Consumers desire personal attention and care especially when they are ill. This need is partially satisfied by referring to the consumer by their first name wherever possible, as this enhances their feelings of security by giving them a sense of belonging. Also, sole owner pharmacists develop a sense of recognition of a consumers' medication without reference to their computer archives. This assists consumers tremendously as they often have difficulty remembering the names of the medication or forget to order an item on their treatment. Open ownership pharmacies utilising part-time pharmacists are unlikely to be able to achieve this due to the lack of time spent interacting with the patient.

Consumers that regularly purchase from sole owner pharmacies have a relationship with their pharmacist based on trust. This relationship is vital to the patients' successful treatment and the implementation of pharmaceutical care. Open ownership of pharmacies will not be able to provide the patient-centred approach to consumers due to generalised policies and procedures. Thus, the researcher believes that the open ownership of pharmacies will reduce the quality of pharmaceutical care for consumers and the autonomy of the pharmacists and therefore accepts the null hypothesis H<sub>o</sub> based on the results of this study.

The research has the following limitations:

- Due to time and budget constraints, the study was carried out on a small sample of consumers and pharmacists from the central business district of Durban using a convenience sample.
- Consumer preferences change over time especially with the current trend of easily accessible information and reduced disposable income.
- Trust is not a definite measurable variable.

#### 5.3. Recommendations for Future Research

A recommendation for future researchers would be to measure the quality of pharmaceutical care received by consumers purchasing at open ownership pharmacies and compare this to the quality of pharmaceutical care received by consumers purchasing at sole owner pharmacies. Such a study should take a larger sample size so that the sample is more accurately representative of the population. Investigations in consumer behaviour should yield recommendations for both business models so that improvements can be made to both models. Such research would contribute immensely to South Africa achieving its goal of a quality, transparent affordable healthcare system.

#### References

- E-Drug: Influence of 'open ownership ' of retail pharmacies, May 1997, Andy Gray. http://www.essentialdrugs.org/edrug/archive/199705/msg00074.php
- 2. Henry Dummett: An Overview of Supply and Demand in South Africa's Pharmaceutical Industry – Opportunity or Risk, Business Briefing: Pharmatech 2002.
- 3. Sunday Times: *New Clicks injects cash into pharmacy deal*, 21 July 2002. http://www.sundaytimes.co.za/2002/07/21/business/companies/comp01.asp
- 4. SAPA: New Clicks in R200m pharmacy venture, Health Systems Trust, April 2003. http://new.hst.org.za/news/index.php/20010418/
- New Clicks Holdings Limited: New Clicks poised for strong growth, Press Release, August 2002.
   <a href="http://www.newclicks.co.za/news/archive/strong">http://www.newclicks.co.za/news/archive/strong</a> growth 31 08.html
- New Clicks Holdings Limited: New Clicks acquires United Pharmaceutical Distributors, Press Release, July 2002.
   <a href="http://www.newclicks.co.za/news/archive/Pharmaceutica">http://www.newclicks.co.za/news/archive/Pharmaceutica</a> 16 07.html
- 7. Begley; Sharon: *The End of Antibiotics*, Newsweek, Vol. 98 pg101-103
- Sunday Times: Just the Medicine, 22 February 2002.
   <a href="http://www.sundaytimes.co.za/2002/07/21/business/news/news01.asp">http://www.sundaytimes.co.za/2002/07/21/business/news/news01.asp</a>
- 9. Reekie DW: Cartels, spontaneous price discrimination and international pharmacy retailing, International Journal of Economics of Business, Vol.4, No.3, 1997

- 10. Khan T: Still no clarity on the health department's vision of a transparent pricing system, Business Day, April 2003.
  http://allafrica.com/stories/200304100496.html
- 11. SAPA: New Clicks in R200m pharmacy venture, Health Systems Trust, April 2003. http://new.hst.org.za/news/index.php/20010418/
- 12. New Clicks Holdings Limited: *New Clicks poised for strong growth*, Press Release, August 2002.

  <a href="http://www.newclicks.co.za/news/archive/strong">http://www.newclicks.co.za/news/archive/strong</a> growth 31 08.html
- New Clicks Holdings Limited: New Clicks acquires United Pharmaceutical Distributors, Press Release, July 2002.
   <a href="http://www.newclicks.co.za/news/archive/Pharmaceutica\_16\_07.html">http://www.newclicks.co.za/news/archive/Pharmaceutica\_16\_07.html</a>
- 14. Taylor, Harding. 2003. 'Does corporate based pharmacy threaten evidence-based practice and policy?' *The Pharmaceutical Journal*, Vol 270 No. pp.
- 15. Buisson J. 2003. 'Deregulation of community pharmacy receives little support from profession' *The Pharmaceutical Journal*, Vol 270 No. pp. 108-110
- 16. Jones L. 23 April 2003. 'Pay-back times for Clicks?' Finance Week pp. 28
- 17. Hoyer, MacInnis. 2001. *Consumer Behavior*. 2<sup>nd</sup> Edition. Houghton Mifflin Company, 222 Berkeley Street, Boston.
- 18. Kolb, Msweli-Mbanga, Pramjeeth. September 2001. *Marketing Management Book 3: Specific Topics in Marketing*. 1<sup>st</sup> Edition. Natal Business School Publishers, Durban.
- 19. J.C. Mowen and M.S. Minor. 2001. *Consumer Behavior: A Framework*. 1<sup>st</sup> Edition. Prentice-Hall, Inc., Upper Saddle River, New Jersey, 07458.

- 20. P. Ghauri, K. Gronhaug and I. Kristianslund. 1995. Research Methods in Business Studies: A Practical Guide. 2<sup>nd</sup> Edition. Prentice Hall, Europe.
- 21. Cooper, D.R. and Schindler, P.S. (2000). Business Research Methods. 7<sup>th</sup> Edition. McGraw-Hill: New York.

# **Appendix**

### Patient Research Questionnaire

Please complete the questionnaire and answer the following questions as honestly as you can. All information is strictly confidential. This questionnaire is part of a research project towards a Masters Degree in Business Administration at the University of Natal: Durban campus. Your assistance is highly appreciated.

The following questions are merely for research purposes and are not intended to be discriminatory in any way.								
In the f	Section 1: Demographics In the first part of the questionnaire, it would be appreciated if you could answer the following questions about yourself. Please put a cross in the appropriate box.							
1.	Gender:	Gender: male $\Box^a$		female $\Box^b$				
2.	Marital Statu	s:	single	a	marrie	d/co-ha	biting $\Box^{\mathrm{b}}$	
			separat	ed/divo	orced 🗆	;	widowed $\square^d$	
3.	Do you have o	children	?	no □ <sup>a</sup>	yes, ur	nder 10	years of age [	$\supseteq^{\mathbf{b}}$
				yes, 10	) years a	and olde	er □ <sup>c</sup>	
				yes, bu	ıt no ch	ildren le	ess than 21 ye	ars of age 🗆
4.	What is your	age groi	up?					
18-2	25 □ <sup>a</sup> 26-35	Ъ	35-45 [	$\supseteq^{c}$	46-55	$\Box^{d}$	56-65 □ <sup>e</sup>	65+ □ <sup>f</sup>
5.	Employment:		student	t 🗆 a	emplo	yed □ <sup>b</sup>	not working	$\Box^{\mathbf{c}}$
			self-em	ployed	$\Box^{\mathbf{d}}$	retired	□ <sup>e</sup>	
6. Y	our Occupatio	on		•••••	•••••	••••••		
7.	Monthly gross	s housel	hold inc	come:		up to 1	0 000 □²	

 $20000 - 30\ 000\ \Box^{c}$ 

more than  $30\ 000\ \Box^d$ 

 $10\ 000 - 20\ 000\ \Box^{b}$ 

# Section 2: Product Purchasing Behavior

8. How often do you purchase from a pharmacy?
Daily $\Box^a$ Weekly $\Box^b$ Monthly $\Box^c$ Yearly $\Box^d$
9. Are you a member of a medical aid?
Yes $\Box^a$ No $\Box^b$
10. How much do you contribute towards your medical aid monthly?
$<$ R300 $\square$ <sup>a</sup> $<$ R500 $\square$ <sup>b</sup> $<$ R1000 $\square$ <sup>c</sup> $>$ R1000 $\square$ <sup>d</sup>
11. How much do you budget monthly for items purchased from the pharmacy?
$<$ R100 $\square$ <sup>a</sup> $<$ R500 $\square$ <sup>b</sup> $<$ R1000 $\square$ <sup>c</sup> $<$ R1500 $\square$ <sup>d</sup>
12. Do you always go to the same pharmacy to make your purchases?
Yes $\Box^a$ No $\Box^b$
13. If your answer to question 12 is yes, please answer this question. How long have you been purchasing from this pharmacy?
<1 year $\Box^a$ <5 years $\Box^b$ <10 years $\Box^c$ >10 years $\Box^d$
14. Do you require the following services from your pharmacist:
a. Delivery Service □  b. Telephonic Orders □  c. Account Facilities □  d. Personal Care e.g. reminders; etc □  e. After sales service □  f. Advice with health related problems □  g. Assistance in dealing with medical aids □  g
15. Are you satisfied with current services offered by your pharmacist? Are there any other additional services that could be offered to you to improve your convenience? Yes \( \preceq^a  \text{No}  \preceq^b \)

•	n your pharmacist?
Yes □ <sup>a</sup>	No $\Box^b$
17. Do you pre	fer purchasing from chain store pharmacies e.g. Sparksport?
Yes □ <sup>a</sup>	No $\Box^b$
	l that the quality of service and care you receive from such s is inadequate?
Yes □ <sup>a</sup>	$No\Box^{b}$
19. Are you aw	vare that non-pharmacist may now own pharmacies? E.g. Clicks
Yes $\Box^a$	No $\Box^{b}$
	be comfortable purchasing your health requirements from a owned by a pharmacist? Please comment.
Yes □ <sup>a</sup>	No □ <sup>b</sup>
	Patient Relationship have you known your current pharmacist?
<1 year □ <sup>a</sup> <5	years $\Box^{b}$ <10 years $\Box^{c}$ >10 years $\Box^{d}$
	pharmacist show interest in aspects of your life so that he may more personalized service?
Yes □ <sup>a</sup> No	$\Box^{\mathbf{b}}$
23. Does your successful	pharmacist instill confidence in you that your treatment will be?
Yes □ <sup>a</sup> No	$\Box^{b}$
	feel comfortable asking your pharmacist for advice on a health sonal problem?
Yes □ <sup>a</sup> No	⊓ <sub>р</sub>

25. Would you feel comfortable asking your pharmacist for advice on a non-health related personal problem?
Yes $\Box^a$ No $\Box^b$
26. Do you always follow the advice given to you by your pharmacist in treatment of your illness?
Yes $\Box^a$ No $\Box^b$
27. Are you pleased with the manner in which your pharmacist performs his services?
Yes $\square^a$ No $\square^b$
28. Does your pharmacist give you reasonable information on why your sickness occurred?
Yes $\square^a$ No $\square^b$
29. Have family or friends recommended your pharmacist to you?
Yes $\Box^a$ No $\Box^b$
30. Would you recommend your pharmacist to your family and friends?
Yes $\Box^a$ No $\Box^b$
Thank you for taking the time to complete this questionnaire.

## Pharmacist Research Questionnaire

Please complete the questionnaire and answer the following questions as honestly as you can. All information is strictly confidential. This questionnaire is part of a research project towards a Masters Degree in Business Administration at the University of Natal: Durban campus. Your assistance is highly appreciated.

University of Natal: I	Ourban campu	s. Your assista	nce is highly appreciated.
The following question discriminatory in any	-	for research p	urposes and are not intended to be
_	questionnaire	-	opreciated if you could answer the coss in the appropriate box.
1. Are you the so	ole owner of t	his pharmacy?	,
Yes $\Box^a$ No $\Box^b$			
2. If your responding pharmacy?  a Ye	-	n 1 is yes, how	long have you owned this
3. What is the gr	owth rate of	your patient ba	ise yearly?
<10% □ <sup>a</sup>	10-20% □ <sup>b</sup>	20-30% □ <sup>c</sup>	>30% □ <sup>d</sup>
Section 2: Product S	ales Behavio	ur	
4. In what media	ım do consun	ners pay for pu	rchases and what percentage is
this medium o	f your total s	ales?	
			%
Cash / Credit Card	$\Box^a$		
Account (Debtors)	$\Box_p$		
Medical Aid	$\Box^{\mathbf{c}}$		_
Other:	$\Box^{\mathbf{d}}$		

5. <i>Do</i> y	ou offer the following services to your p	valients:
a	. Delivery Service	$\square^{\mathbf{a}}$
b	. Telephonic Orders	$\Box^{\mathrm{b}}$
c	. Account Facilities	$\Box^{\mathbf{c}}$
d	l. Personal Care e.g. reminders; etc	$\Box^{\mathbf{d}}$
e	e. After sales service	$\Box^{\mathbf{e}}$
f	Advice with health related problems	$\Box^{\mathbf{f}}$
g	g. Assistance in dealing with medical ai	$ds$ $\Box^g$
6. Wou	ald you be willing to offer your consume	ers any additional services?
$Yes \square^a$	$No\square^{b}$	
7. If yo	our answer to question 6 is yes, what typ	e of additional services would
you l	be willing to offer your consumers?	
		-
8. Do y	ou hire locum (part-time) pharmacists:	
Yes □ <sup>a</sup>	$No\; \Box^{b}$	
9. If yo	ur answer to question 7 is yes, do you f	ind that your patients are
satis	fied with the level of service received fr	om locum pharmacist? Please
comi	ment.	
Yes □ <sup>a</sup>	No $\Box^{b}$	
	<del>-</del>	
<u>-                                    </u>		

	the services that your organization offers to promote repeat
purchas	es
11 Daggar	and a second and differentiate itself from other pharmacies? If you
	our organization differentiate itself from other pharmacies? If your
	is yes, please comment.
Yes □ <sup>a</sup> 1	No 🗆
	<del></del>
12. Has the	entry of chain-store pharmacies affected your patient base growth
	l if so, what have you done to maintain a successful patient base
growth	
_	No □ <sup>b</sup>
Yes 🗆 🗆	NO LI
<del></del>	

Section	3:	<b>Pharmacist-Patient</b>	Relationship
---------	----	---------------------------	--------------

13. <b>Do</b> y	you find that patients regard the patient-pharmacist relationship as an
imp	ortant part of their treatment? Please discuss.
Yes □ <sup>a</sup>	No □ <sup>b</sup>
14. Ho	w long have you known your most of your patients?
<1 year	$\Box^a < 5 \text{ years } \Box^b < 10 \text{ years } \Box^c > 10 \text{ years } \Box^d$
	you show interest in your aspects of your patients' lives so that you may your patients a more personalized service?
Yes	$: \square^a \ \ \text{No} \ \square^b$
	you instill confidence in your patients that their treatment will be cessful?
Yes	$s \Box^a No \Box^b$
	you think that your patients would feel comfortable asking you you're advice on a health related personal problem?
Yes	$s \Box^a No \Box^b$
	you think that your patients would feel comfortable asking you for your ice on a non-health related personal problem?
Yes	$s \Box^a No \Box^b$
	your patients always follow the advice given by you in treatment of their
Yes	s □ <sup>a</sup> No □ <sup>b</sup>
	you think that your patients are pleased with the manner in which you form your services?
Yes	s □ <sup>a</sup> No □ <sup>b</sup>

21. Do you give your patients reasonable information on why their sickness occurred?
Yes $\Box^a$ No $\Box^b$
22. Do you give you patients' reasonable information on how their medication treats their medical condition?
Yes $\Box^a$ No $\Box^b$
23. Do your patients recommend family and friends to you?
Yes $\Box^a$ No $\Box^b$

Thank you for taking the time to complete this questionnaire