INFLUENCE OF PHARMACEUTICAL ADVERTISING ON CONSUMERS:
AN EXPLORATORY DESCRIPTIVE STUDY

BC KNOESEN
INFLUENCE OF PHARMACEUTICAL ADVERTISING ON CONSUMERS:
AN EXPLORATORY DESCRIPTIVE STUDY

BRENT C KNOESEN

submitted in fulfilment of the requirements for the degree

MAGISTER PHARMACIAE

in the

FACULTY OF HEALTH SCIENCES

at the

NELSON MANDELA METROPOLITAN UNIVERSITY

November 2007

Supervisor: Prof I Truter
Co-supervisor: Dr L Stroud
I, Brent Claud Knoesen, hereby declare that the work on which this dissertation is based is original (except where acknowledgements indicate otherwise) and that neither the whole work nor any part of it has been, is being, or is to be submitted for another degree at this or any other university.
ACKNOWLEDGEMENTS

- Praise to God for the opportunity given to me to complete this study.
- Thank you to my mother, brother, grandmother, other family members, and friends who have supported and assisted me during the good and bad times.
- Thank you to my supervisor, Prof I Truter, and co-supervisor, Dr L Stroud, for their leadership, support, and guidance.
- Thank you to Mr DJL Venter for his statistical assistance.
- Thank you to Rene Smit who acted as facilitator in the focus group.
- Thank you to the consumers within the Nelson Mandela Metropole who participated in the focus group and consumer survey as well as the community pharmacies where the survey was conducted.
- Thank you to the Nelson Mandela Metropolitan University for providing me with the opportunity to conduct research.

Brent C Knoesen

November 2007
Dedicated to my father, Kenneth Oswald Knoesen and my brother, Clint Kenneth Knoesen.
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>TABLE OF CONTENTS</td>
<td>i</td>
</tr>
<tr>
<td>LIST OF FIGURES</td>
<td>vii</td>
</tr>
<tr>
<td>LIST OF TABLES</td>
<td>xii</td>
</tr>
<tr>
<td>ABSTRACT</td>
<td>xvi</td>
</tr>
<tr>
<td>KEY WORDS</td>
<td>xvii</td>
</tr>
</tbody>
</table>

## CHAPTER 1
INTRODUCTION

1.1 INTRODUCTION 1
1.2 MOTIVATION FOR THE STUDY 5
1.3 PRIMARY AIM AND OBJECTIVES OF THE STUDY 6
1.4 CHAPTER LAYOUT 6

## CHAPTER 2
ADVERTISING

2.1 INTRODUCTION 8
2.2 EVOLUTION OF ADVERTISING 8
2.3 ADVERTISING AS MARKETING TOOL 12
  2.3.1 Fundamentals of advertising 12
  2.3.2 Promotional mix 14
2.3.3 Main types of advertisements 22
2.4 PHARMACEUTICAL ADVERTISING 26
2.4.1 Direct-to-consumer advertising 28
2.5 PSYCHOLOGICAL IMPACT OF ADVERTISING 37
2.5.1 Consumers’ decision-making process regarding purchasing 38
2.5.2 Persuasive communication 42
2.5.3 Emotion in advertising 46
2.6 PREATTENTIVE PROCESSING OF ADVERTISEMENTS 49
2.7 CONCLUSION 51

CHAPTER 3
SCIENCE OF ADVERTISING

3.1 INTRODUCTION 53
3.2 SEMIOTICS 53
3.2.1 Semiotic concepts 55
3.2.2 Application of semiotics in pharmaceutical advertisements 69
3.3 COLOUR PSYCHOLOGY 85
3.3.1 Application of colour in pharmaceutical advertisements 88
3.4 CONCLUSION 93
## CHAPTER 4
FORENSIC ASPECTS OF PHARMACEUTICAL ADVERTISING

4.1 INTRODUCTION 94

4.2 WORLD HEALTH ORGANISATION GUIDELINES FOR PROMOTION OF MEDICINES 96

4.3 FORENSIC ASPECTS OF PHARMACEUTICAL ADVERTISING IN SOUTH AFRICA 98

4.3.1 Laws and ethical codes governing pharmaceutical advertising practices 98

4.3.2 Pharmaco-legal aspects of advertisements 102

4.3.3 General requirements for pharmaceutical advertisements 108

4.3.4 Pharmaceutical advertisements directed at healthcare professionals 110

4.3.5 Claims in pharmaceutical advertisements 110

4.3.6 Slimming product advertisements 112

4.3.7 Pharmaceutical advertising on the Internet 115

4.4 FORENSIC ASPECTS OF PHARMACEUTICAL ADVERTISING IN INTERNATIONAL COUNTRIES 117

4.4.1 Australia and New Zealand 117

4.4.2 Canada 127

4.5 INVESTIGATION INTO THE LEGAL ASPECTS OF PHARMACEUTICAL ADVERTISING 136

4.5.1 Introduction 136

4.5.2 Comparing guidelines of the World Health Organisation regarding Pharmaceutical advertising to South African Legislation 136

4.5.3 Comparing pharmaceutical advertising regulations of South Africa, Australia, New Zealand, and Canada 139
4.5.4 Problematic areas in South African pharmaceutical advertising law

4.6 CONCLUSION

CHAPTER 5
METHODOLOGY

5.1 INTRODUCTION

5.2 EMPIRICAL STUDY
5.2.1 Consumers’ perceptions of pharmaceutical advertisements
5.2.2 Consumer survey
5.2.3 Decoding pharmaceutical advertisements

5.3 ETHICAL MEASURES
5.3.1 Ethical measures followed in focus group
5.3.2 Ethical measures followed in consumer survey

CHAPTER 6
RESULTS

6.1 INTRODUCTION

6.2 FOCUS GROUP
6.2.1 Summary of focus group
6.2.2 Group tasks
6.2.3 Conclusion

6.3 CONSUMER SURVEY
6.3.1 Introduction
6.3.2 Demographics
6.3.3 Media preferences of consumers  191
6.3.4 Pharmaceutical advertisements in general  194
6.3.5 Evaluation of pharmaceutical advertisements  200
6.3.6 Conclusion  203

6.4 DECODING PHARMACEUTICAL ADVERTISEMENTS  204
6.4.1 Introduction  204
6.4.2 Phytocor®  206
6.4.3 Panado® MedSip  212
6.4.4 Erectile dysfunction awareness  217
6.4.5 Conclusion  223

CHAPTER 7
DISCUSSION AND CONCLUSION

7.1 INTRODUCTION  225
7.2 PERCEPTIONS TOWARDS PHARMACEUTICAL ADVERTISEMENTS IN SOUTH AFRICA
7.2.1 Phytochor®  228
7.2.2 Panado® MedSip  229
7.2.3 Erectile dysfunction awareness  230
7.3 PROBLEMATIC AREAS IN PHARMACEUTICAL ADVERTISEMENTS FOUND IN SOUTH AFRICA
7.4 CONCLUSION  232
7.4.1 Recommendations  234
7.4.2 Limitations of the study  234
7.4.3 Suggestions for future research  235
7.4.4 Concluding remarks  235
REFERENCES 237
APPENDIX A: FOCUS GROUP PREAMBLE 254
APPENDIX B: FOCUS GROUP PROTOCOL 255
APPENDIX C: PHYTOCOR® 256
APPENDIX D: PANADO® MEDSIP 257
APPENDIX E: ERECTILE DYSFUNCTION AWARENESS 258
APPENDIX F: CONSUMER SURVEY QUESTIONNAIRE 259
APPENDIX G: FOCUS GROUP CONSENT FORM 262
APPENDIX H: PREAMBLE TO COMMUNITY PHARMACY 263
APPENDIX I: CONSENT FORM TO COMMUNITY PHARMACY 264
GLOSSARY 265
## LIST OF FIGURES

| Figure 2.1 | Advertisement for Shepherd Medicine found in Baltimore in 1840 | Page 9 |
| Figure 2.2 | Advertisement of Vegetable Pills in Philadelphia in 1849 | Page 10 |
| Figure 2.3 | A Chinese advertisement of Bayer Aspirin in 1935 | Page 11 |
| Figure 2.4 | The promotional mix | Page 14 |
| Figure 2.5 | Examples of a baby competition employed as a consumer-orientated sales promotional technique by a South African pharmaceutical company | Page 20 |
| Figure 2.6 | A public service advertisement regarding AIDS | Page 23 |
| Figure 2.7 | The Environmental Protection Agency (EPA), using emotional appeal to focus on how environmental pollution can affect the health of children | Page 23 |
| Figure 2.8 | Examples of guerrilla advertising | Page 25 |
| Figure 2.9 | Example of a misleading guerrilla advertisement | Page 26 |
| Figure 2.10 | Example of a typical community pharmacy advertisement | Page 28 |
| Figure 2.11 | A direct-to-consumer advertisement of the cholesterol-lowering medicine, Crestor® seen on television in the USA | Page 29 |
| Figure 2.12 | Example of an antiretroviral advertisement on the Internet | Page 29 |
| Figure 2.13 | Timeline indicating the history of direct-to-consumer advertising in the USA | Page 30 |
| Figure 2.14 | Health-seeking advertisement regarding cholesterol tests | Page 33 |
| Figure 2.15 | Advertisements for the hormonal product, Diane®-35 | Page 34 |
| Figure 2.16 | Spending on direct-to-consumer advertising in the USA from 1997 to 2005 | 36 |
| Figure 2.17 | Basic model of consumer decision making | 39 |
| Figure 2.18 | The SMCR model | 43 |
| Figure 2.19 | Elaboration likelihood model (ELM) | 44 |
| Figure 2.20 | Associate mode of persuasion by emotion | 48 |
| Figure 2.21 | Implicit mode of persuasion by emotion | 48 |
| Figure 2.22 | Explicit mode of persuasion by emotion | 49 |
| Figure 2.23 | Hemispheric lateralisation | 50 |
| Figure 3.1 | The two-fold system of a sign | 56 |
| Figure 3.2 | Example that explains the two-fold system of a sign | 56 |
| Figure 3.3 | A rose as a sign, signifier, and signified | 57 |
| Figure 3.4 | The rose and its connotation | 58 |
| Figure 3.5 | Basic communication model illustrating the role of encoding and decoding | 61 |
| Figure 3.6 | Advertisement of Chanel® No. 5 | 62 |
| Figure 3.7 | Decoding of the Chanel® No. 5 advertisement according to Williamson | 63 |
| Figure 3.8 | Decoding advertisements model | 64 |
| Figure 3.9 | Vitamin advertisement illustrating the referent system, cooking nature | 65 |
| Figure 3.10 | Advertisement illustrating the use of nature as a referent system | 66 |
| Figure 3.11 | Advertisement incorporating time as referent system | 67 |
| Figure 3.12 | Pre-introductory advertisement for the antidepressant, Ludiomil® | 71 |
Figure 3.13 Introductory advertisement of Ludiomil®

Figure 3.14 Advertisement of Sedatonyl®

Figure 3.15 Laroxyl® advertisement

Figure 3.16 Monochromatic and polychromatic aspects incorporated in an advertisement for a leading antidepressant medication

Figure 3.17 Dipiperon® advertisement

Figure 3.18 An oral anaesthetic ointment depicting the category of thick lines verses thin lines

Figure 3.19 Anafranil® advertisement

Figure 3.20 Atrium® 300 advertisement

Figure 3.21 Advertisement for the treatment of Irritable Bowel Syndrome illustrating the use of the simple versus complex form category

Figure 3.22 Pragmazone® 25

Figure 3.23 Advertisement of Zinacef® illustrating the use of contagion

Figure 3.24 Advertisement of PremPak®-C illustrating polarity of choice

Figure 3.25 Advertisement of Ciproxin® illustrating ourselves and others

Figure 3.26 Advertisement incorporating various bright colours

Figure 3.27 Orango® advertisement

Figure 3.28 Tranquilyt® advertisement

Figure 3.29 Citro-Soda® advertisement

Figure 4.1 Billboard advertisement in the Nelson Mandela Metropole of a Schedule 2 codeine-containing analgesic

Figure 4.2 Example of an illegal advertisement
<table>
<thead>
<tr>
<th>Figure</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Figure 4.3</td>
<td>Example of a slimming advertisement containing unacceptable claims</td>
<td>115</td>
</tr>
<tr>
<td>Figure 4.4</td>
<td>Pharmaceutical advertisement of a Schedule 4 medicine in the form of an electronic-mail</td>
<td>115</td>
</tr>
<tr>
<td>Figure 4.5</td>
<td>Pharmaceutical advertisement on the Internet directed at the general public</td>
<td>116</td>
</tr>
<tr>
<td>Figure 4.6</td>
<td>Key advertising principles therapeutic products should adhere to</td>
<td>121</td>
</tr>
<tr>
<td>Figure 4.7</td>
<td>Identification of the three direct-to-consumer advertisements found in Canada</td>
<td>131</td>
</tr>
<tr>
<td>Figure 4.8</td>
<td>Controversial product claim advertisement for the medicine Cilais®</td>
<td>132</td>
</tr>
<tr>
<td>Figure 4.9</td>
<td>Reminder advertisement for the medicine, Viagra®</td>
<td>133</td>
</tr>
<tr>
<td>Figure 4.10</td>
<td>Help-seeking advertisement for oesophageal reflux</td>
<td>134</td>
</tr>
<tr>
<td>Figure 4.11</td>
<td>Definitions of pharmaceutical advertising in the legislation of Australia and New Zealand</td>
<td>140</td>
</tr>
<tr>
<td>Figure 4.12</td>
<td>Definition of pharmaceutical advertising in the legislation of Canada</td>
<td>140</td>
</tr>
<tr>
<td>Figure 4.13</td>
<td>Definition of advertising published in the Medicines Act of South Africa</td>
<td>141</td>
</tr>
<tr>
<td>Figure 5.1</td>
<td>Three phases used to conduct a focus group</td>
<td>152</td>
</tr>
<tr>
<td>Figure 6.1</td>
<td>Age distribution of participants</td>
<td>190</td>
</tr>
<tr>
<td>Figure 6.2</td>
<td>Participants’ exposure to media preferences</td>
<td>192</td>
</tr>
<tr>
<td>Figure 6.3</td>
<td>Number of males and females exposed to the seven media preferences on a weekly basis</td>
<td>193</td>
</tr>
<tr>
<td>Figure 6.4</td>
<td>Exposure of different age groups to the seven media preferences on a weekly basis</td>
<td>194</td>
</tr>
<tr>
<td>Figure 6.5</td>
<td>Participants’ opinions regarding the understanding of pharmaceutical advertisements</td>
<td>195</td>
</tr>
<tr>
<td>Figure 6.6</td>
<td>Participants’ opinions regarding misleading pharmaceutical advertisements</td>
<td>197</td>
</tr>
</tbody>
</table>
Figure 6.7  Participants’ opinions to the emotional aspects of pharmaceutical advertisements

Figure 6.8  Opinions regarding emotional advertisements directed at participants suffering from chronic conditions

Figure 6.9  Participants’ opinions regarding the aesthetic appeal in pharmaceutical advertisements
## LIST OF TABLES

<table>
<thead>
<tr>
<th>Table</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.1</td>
<td>Differences between advertising and sales promotion</td>
<td>21</td>
</tr>
<tr>
<td>2.2</td>
<td>Arguments for and against direct-to-consumer advertising</td>
<td>32</td>
</tr>
<tr>
<td>2.3</td>
<td>Most heavily promoted medicines in the USA for 2005</td>
<td>36</td>
</tr>
<tr>
<td>2.4</td>
<td>Comparison between the advertising costs of Vioxx®, Pepsi®, and Dell computers in 2000</td>
<td>36</td>
</tr>
<tr>
<td>3.1</td>
<td>Definition of the three types of signs</td>
<td>58</td>
</tr>
<tr>
<td>3.2</td>
<td>Visual images identifying the type of signs implemented</td>
<td>60</td>
</tr>
<tr>
<td>3.3</td>
<td>Psychological interpretation and symbolism of warm colours</td>
<td>88</td>
</tr>
<tr>
<td>3.4</td>
<td>Psychological interpretation and symbolism of cool colours</td>
<td>89</td>
</tr>
<tr>
<td>3.5</td>
<td>Psychological interpretation and symbolism of black, white, pink, and brown</td>
<td>90</td>
</tr>
<tr>
<td>4.1</td>
<td>Examples of regulatory authorities governing pharmaceutical advertising in selected countries</td>
<td>95</td>
</tr>
<tr>
<td>4.2</td>
<td>Example of an advertisement that is in breach of Regulation 45 2)(b)</td>
<td>107</td>
</tr>
<tr>
<td>4.3</td>
<td>Example of an advertisement which is permitted</td>
<td>107</td>
</tr>
<tr>
<td>4.4</td>
<td>Rulings regarding specific claims made in pharmaceutical advertisements</td>
<td>111</td>
</tr>
<tr>
<td>4.5</td>
<td>Additional regulations regarding slimming products</td>
<td>113</td>
</tr>
<tr>
<td>4.6</td>
<td>Acronyms used to distinguish authorised health products from unauthorised health products</td>
<td>128</td>
</tr>
</tbody>
</table>
Table 4.7  Canadian self-regulatory authorities and their responsibilities  
Table 4.8  Compliance to criteria for the purpose of identifying medicines and the manufacturer or distributor thereof in advertisements  
Table 4.9  Compliance to pharmacological norms  
Table 5.1  Main advantages and disadvantages of a focus group  
Table 5.2  Demographics of the six focus group participants  
Table 5.3  Classification of the ten major occupation groups of participants  
Table 6.1  Themes and thematic headings identified in each topic  
Table 6.2  Panado® MedSip and erectile dysfunction awareness advertisements: Themes and thematic headings  
Table 6.3  Major occupation groups to which participants belong  
Table 6.4  Statements regarding themes posed to participants  
Table 6.5  Statements regarding misleading advertisements posed to participants  
Table 6.6  Statements regarding emotional pharmaceutical advertisements posed to participants  
Table 6.7  Statements regarding the use of aesthetics in pharmaceutical advertisements  
Table 6.8  Statements regarding the two pharmaceutical advertisements to which participants were exposed to  
Table 6.9  The sign, signifier, and signified of the Phytocor® advertisement  
Table 6.10  Identification of the sign, signifier, and signified of the Panado® MedSip advertisement
| Table 6.11 | Sign, signifier, and signified of the erectile dysfunction awareness advertisement | 218 |
“Advertising is legalised lying”

HG Wells
ABSTRACT

Pharmaceutical advertising involves the advertising of medicines, medical devices, and healthcare services. A review of available international literature indicates the belief that pharmaceutical advertisements negatively affect healthcare decisions made by consumers. Very little research has been conducted to determine how consumers in South Africa (SA) are affected by pharmaceutical advertisements.

This study aimed to determine how consumers in the Nelson Mandela Metropole (NMM) perceive pharmaceutical advertisements. More specific objectives included the investigation of legislation in SA employed in pharmaceutical advertisements, the interpretation and misinterpretation of the advertisements, and the identification of problematic areas in this form of advertising.

South African legislation applied to pharmaceutical advertisements was investigated by means of a literature review. A qualitative research design was also used to achieve the aim and objectives. This included a focus group consisting of six randomly selected participants in the NMM. A consumer survey, consisting of 100 consumers obtained from 10 randomly selected community pharmacies within the NMM, supported the findings of the qualitative techniques. The themes identified in the focus group were incorporated into a questionnaire used in the consumer survey. Three randomly selected pharmaceutical advertisements were also decoded to interpret the components employed in each.

The results determined that pharmaceutical advertising is a marketing tool that incorporates various emotional and psychological techniques to persuade consumers. It was also evident that consumers can misinterpret pharmaceutical advertisements. Various legal and ethical problems were identified in pharmaceutical advertisements. These results showed that pharmaceutical advertisements have the possibility of negatively affecting consumers’ healthcare decisions and warrants further investigation.
KEY WORDS

• Colour psychology
• Decoding
• Direct-to-consumer advertisements
• Elaboration Likelihood Model
• Persuasive communication
• Pharmaceutical advertisements in South Africa
• Semiotics
• Signs
CHAPTER 1
INTRODUCTION

1.1 BACKGROUND TO THE STUDY

Society has become a place in which people are exposed to thousands of advertisements on a daily basis. When watching television, listening to the radio, or opening a magazine or newspaper, people will be exposed to advertisements of various products or services.

Advertising is a marketing tool that, as a result of consumers being bombarded with advertisements, has become a more acceptable form of communication. It is a lucrative marketing tool as can be proven by the advertising expenditure figures of large multinational companies. In the United States of America (USA), five of the leading advertisers spent a total of $12,723.1 million dollars in 2001 alone. General Motors Corporation spent the most on advertising, a total of $3,374.4 million dollars. Two of these five companies were pharmaceutical companies. Proctor and Gamble spent the second most on advertising in 2001 with $2,540.6 million dollars, while Pfizer spent fifth most with $2,189.5 million dollars (Belch & Belch, 2004: 17). As these figures only consist of advertising expenditure in the USA, it can be guessed that global spending on advertising will provide staggering figures.

Most people believe that advertising is a form of communication with the “express purpose of selling a product or service”. Enormous advertising budgets can therefore result in only one thing – large sales figures (Vilanilam & Varghese, 2004: 4). This belief is reflected when looking at the value of well-known brands in the world in 2002, it was determined that the Coca-Cola® brand is worth $69.6 billion dollars, the Microsoft® brand is worth $64.1 million dollars, and the well-known cigarette brand, Marlboro®, is worth $24.2 billion dollars (Belch & Belch, 2004: 15).

Although it is believed that advertising is only used to sell products or services, Vilanilam and Varghese (2004: 4) believe that advertising cannot buy or sell but can only
influence the consumer and help the seller. In this statement, “only influence the consumer” lays the moral and ethical dilemma when advertising pharmaceutical products.

Ray Moynihan and Alan Cassels (2005: ix), in their book, Selling Sickness How Drug Companies Are Turning Us All Into Patients, believe that pharmaceutical advertising has become an “aggressive” advertising tool that, today, is not just targeted at the sick but even more so at the healthy and well. Moynihan and Cassels (2005: x) also stated that the purpose of pharmaceutical advertising is to “exploit our deepest fears of death, decay, and disease”. Here, they used examples of common complaints that were transformed into “frightening” conditions in the media: shyness is now labelled as a social anxiety disorder, everyday sexual difficulties are seen as sexual dysfunction, and premenstrual syndrome (PMS) is called pre-menstrual dysphoric disorder (PMDD) (Moynihan & Cassels, 2005: x). Their argument is that there is money to be made in telling healthy people that they are sick (Moynihan & Cassels, 2005: x).

Patrick Holford and Jerome Burne also support the idea that pharmaceutical advertising is more about money than about providing healthcare information. They provided a comparison of “good” medicines versus “profitable” medicines. Holford and Burne (2006: 6) defined good medicines as medicines that work, in other words, medicines that relieve pain and remove the cause. Good medicines are also safe with minimal side effects and are not expensive. Most importantly, it is practical to use. Conversely, profitable medicines are expensive and designed to relieve symptoms but not its cause. This ensures that patients keep on taking it. Furthermore, profitable medicines are also synthetic to ensure patentability. The major difference between good medicines and profitable medicines is that profitable medicines are supported by multi-million dollar marketing campaigns (Holford & Burne, 2006: 6).

A similar tendency can also be seen in South Africa (SA). Whenever a magazine is opened, a pharmaceutical advertisement can be seen in which a product is glamorised as being the next miracle. In many of the local newspapers found within the Nelson Mandela Metropole (NMM) this is evident as well-known advertisements for ointments and creams are often seen claiming that it has cured a cancer patient. Advertisements
from the pharmaceutical industry also glamorise their treatments as the only solution available to consumers’ problems.

Recently, advertisements of a highly addictive consumer product, alcohol, have received negative publicity from regulatory authorities in SA as it portrays images of social acceptability. It was suggested that advertisements for alcohol should rather be “educational and spell in clear detail the side effects” thereof (South African Human Rights Commission, 2004). Also, cigarette advertisements are no longer seen in public. In accordance with the Tobacco Products Control Amendment Act No. 12 of 1999, such advertisements may no longer appear in the public eye (Department of Health, 2006). It may be argued that similar regulations should apply to pharmaceutical advertisements as medicines can be as harmful as alcohol or cigarettes if used incorrectly or inappropriately.

This study sets out to determine how consumers in the NMM perceive pharmaceutical advertisements. By doing so, it may become apparent that there is the possibility that pharmaceutical advertisements can be misinterpreted or even the possibility that consumers may be deceived. To determine this, the legal aspects of pharmaceutical advertising in SA should also be concentrated on. Due to time constraints, it will be a nearly impossible feat to focus on all the mass media types in which pharmaceutical advertisements can be published. For this reason, this study focused only on pharmaceutical advertisements found in print media.

In SA various acts, codes and guidelines that deal with advertising laws in general exist, also pertaining to pharmaceutical advertisements. The Advertising Standards Authority (ASA) of SA provides various guidelines regarding advertising of pharmaceutical products. The ASA is also the only Authority in SA that regulates all forms of advertisements (ASA, South Africa, 2004). The SA government also has a Marketing Code that provides various guidelines for the advertising of medicines (Code of Practice, 2004). Also, the Medicines and Related Substances Act 101, as amended, contains various Regulations dealing with the advertising of medicines (Pharmaceutical Society of South Africa Pharmacy Law Compendium, 2005). The study investigates the various
legal issues to determine what the legal requirements for pharmaceutical advertisements in print form are.

According to Guy Cook (1992: xvi) advertisements do not only have a sales theme but also a deeper social and psychological theme. For this reason the study will also focus on various psychological principles employed in advertising to assist in determining how consumers may perceive pharmaceutical advertisements. The field of Psychology is a discipline that consists of many theories and principles. It should therefore be realised that this is not an in-depth psychological study but rather a study that selectively uses various psychological theories and principles that can be applied in the understanding of consumer behaviour and how consumers perceive and interpret pharmaceutical advertisements.

Various researchers in the fields of Communication and Sociology, for example Michael Schudson (1993), Judith Williamson (2005), Jean-Marie Floch (2001), and many others, have proven that advertising is a persuasive form of communication. Kenneth Clow and Donald Baack (2005: 120) boldly stated that advertisements have one common goal and that is to persuade. Advertising is not seen just as communication but as mass communication as it transmits a message to a “large, heterogeneous and anonymous group of people” (Vilanilam & Varghese, 2004: 11). William Wells and colleagues (1989: 280) furthermore proved that persuasion is also concerned with emotions. The study looks at these activities employed in advertisements and determine whether this also holds true for pharmaceutical advertisements.

Another activity, semiotics, assists in understanding the various components employed in pharmaceutical advertisements. Simply put, semiotics is the study of signs and symbols, what they mean, and how they are used (Oxford Advanced Learner’s Dictionary, 1989: 1150; Concise Oxford English Dictionary, 2006: 1308). George and Michael Belch (2004: 142) stated that semiotics has an important role to play in marketing communication. Semiotics assists marketers in their understanding of how consumers may interpret words, gestures, myths, signs, symbols, products or services employed in
advertisements (Belch & Belch, 2004: 142). In this study semiotics is used to identify and provide meaning to the various components employed in advertisements.

Also of importance is to look at the colours employed in pharmaceutical advertisements. Wells and colleagues (1995: 474) stated that colours used in advertisements have meaning. They stated that colour provides realism, establishes moods, builds identity, and attracts attention. Wayne Hoyer and Deborah MacInnis (2001: 1992) added that colour affects people physically, psychologically and emotionally. Therefore, in this study the psychological and symbolic meanings of colours employed in pharmaceutical advertisements are considered to a degree.

When applying semiotics to advertisements another process plays a role, namely decoding. Judith Williamson (2001) saw communication, in this case advertisements, as a simple decoding process. In this context, decoding is simply seen as the interpretation of the components of advertisements (Myers, 1997: 53). By incorporating semiotic criteria and the interpretation of colour, decoding can provide meaning to the components employed in pharmaceutical advertisements.

By looking at these various activities in pharmaceutical advertisements it will be possible to gain an understanding of how consumers perceive and interpret pharmaceutical advertisements.

1.2 MOTIVATION FOR THE STUDY

As a result of consumers being bombarded with advertisements on a daily basis, advertising has become a lucrative marketing tool aimed at informing consumers about various products and services (Wells, et al., 1995: 16). Similarly, pharmaceutical advertisements advertise medicines and healthcare related services directly to consumers. International studies indicated that pharmaceutical advertisements do indeed have an impact on the sales of medicines and on the prescribing patterns of medicinal practitioners (Deselle, 2004: 3; Toop, et al., 2003). However, it is also evident that advertisements influence consumers by means of persuasion and emotion (Clow & Baack,
2005: 120; Wells, et al., 1995: 280). Little research exists on the psychological effect pharmaceutical advertisements have on consumers. To date, no such studies have been conducted in SA.

Research in this field is therefore needed to determine the psychological effect of pharmaceutical advertisements on consumers. Ultimately, such studies will determine if pharmaceutical advertisements are a valuable communication tool to educate consumers about their healthcare needs.

1.3 PRIMARY AIM AND OBJECTIVES OF THE STUDY

The primary aim of the study is to identify consumers’ perceptions of pharmaceutical advertisements.

The more specific objectives of the study are to:

- identify the various laws and ethical guidelines pharmaceutical advertisements have to adhere to in SA;
- compare these laws and ethical guidelines to the standard set by the WHO;
- compare these SA laws and guidelines with that of three international countries (Australia, New Zealand, and Canada);
- identify the consumers’ interpretations of pharmaceutical advertisements in SA and identify if possible misinterpretation can occur; and
- to identify problematic areas in pharmaceutical advertisements that requires further investigation.

1.4 CHAPTER LAYOUT

In Chapter one the background of the study, the problem definition, and the primary aim and objectives were outlined. Chapter two provides an overview of advertising and all
the concepts involved. There is also focused on pharmaceutical advertisements in general as well as the psychological aspects employed in advertisements.

Chapter three focuses on semiotics. Various semiotic concepts will be described and many illustrations will be used to explain its usefulness in the decoding of pharmaceutical advertisements. There is also focused on the interpretation of various colours used in advertisements. Advertisements are used to illustrate the use of these concepts.

Chapter four provides an in-depth look at SA legislation employed in pharmaceutical advertisements. There is also focused on how SA legislation compare with guidelines provided by the WHO as well as how this legislation compare to that of Australia, New Zealand and Canada. An investigation into these legal aspects is also conducted.

Chapter five describes the activities employed in the empirical part of the study. This includes the selection of participants for the focus group and for the consumer survey, the planning of various activities to conduct the focus group and consumer survey, data collection procedures, as well as ethical considerations employed. In addition to these procedures, measures to ensure trustworthiness in the focus group are provided. Criteria are also provided for the decoding of selected pharmaceutical advertisements.

The results obtained from the empirical part of this study are presented in Chapter six. Chapter seven provides a more detailed discussion of the results obtained. Limitations of the study are also provided. Possible recommendations are provided to resolve the problematic areas identified in pharmaceutical advertisements. Finally, future research possibilities are provided.
CHAPTER 2
ADVERTISING

2.1 INTRODUCTION

Billions of people worldwide are exposed to advertisements on a daily basis (Wells, et al., 1995: 16). Consumers are bombarded by advertisements in print form found in magazines, journals, and newspapers, on television and radio, as well as those seen in-store. Pharmaceutical companies usually use advertising as a marketing tool to inform their consumers (healthcare professionals and the lay public) about a vast array of goods such as medicines, medical devices, and even healthcare-related advice. In this chapter the evolving role of advertising and its various forms will be focused on as well as its role in the pharmaceutical environment.

Due to the persuasive nature of advertising it can be assumed that advertisements can affect consumers on a psychological level, especially when dealing with health-related matters. Therefore the psychological tools employed in advertisements and how these may affect the consumer will also be focused on.

2.2 EVOLUTION OF ADVERTISING

The beginning of advertising can be traced back 3000 years with a sign of selling wine from ancient Babylonia, or with trade fairs in ancient China during the Western Zhou Dynasty (Landa, 2004: 2). Due to the widespread illiteracy before the age of print, most messages were delivered by criers who stood on street corners or at ancient sport contests. They usually shouted out the wares of the sponsor to the audiences (Landa, 2004: 2; Wells, Burnett & Moriarty, 1995: 22). During these ancient periods information rather than the persuasive type of advertising, as seen today, was the objective of these commercial messages (Wells, et al., 1995: 23).
Mass media was said to be invented by Johannes Gutenberg who started the Gutenberg printing press in 1448 in Germany (Landa, 2004: 3). This caused its popular rise in Europe allowing the widespread distribution of information to the public – the beginning of mass media (Landa, 2004: 3). The term advertising was only introduced in 1655 (Wells, et al., 1995: 24).

It is assumed that modern advertising had its rise in the 18th century or towards the end of the 17th century (Vilanilam & Varghese, 2004: 1). The use of advertising escalated in such a way during this era that India’s first newspaper, the Bengal Gazette which rolled off the press for the first time on 29 January 1780, only carried advertisements on its front page. This practice of publishing advertisements on the front page continued for over a century in England and India (Vilanilam & Varghese, 2004: 3). Print advertisements, such as those appearing in these newspapers, mainly promoted books and also medicines, which became much sought after as disease ravaged Europe. However, even during these times false advertising and so-called “quack” advertisements became a problem which resulted in the regulation of advertising content (Advertising, 2006). Figure 2.1 and Figure 2.2 indicate two pharmaceutical advertisements found in the 1800s.

Figure 2.1 Advertisement for Shepherd Medicine found in Baltimore in 1840
(Source: Helfand, 1998)
In the 19th century, as the economy grew at an alarming rate, the need for advertising developed at the same pace. Classified advertisements became very popular in the USA and its success led to the growth of mail-order advertising. Figure 2.3 illustrates a pharmaceutical advertisement of 1935 in China. The 1960s saw advertisements becoming much more tempting to consumers by focusing more on brand positioning (Advertising, 2006).

In the late 1980s and early 1990s advertising overwhelmed television in which even specialty channels, such as home shopping channels (for example, the Homemark® channel in SA) which dedicates 24 hours to uninterrupted advertising, were developed. Marketing through the Internet also started a new era in advertising during this period. At the turn of the 21st century, search engines such as Google®, revolutionised online advertising. This type of interactive advertising, contrary to belief, emphasises contextually relevant, so-called unobtrusive advertisements that are intended to help, rather than inundate the user (Advertising, 2006).
Figure 2.3 Chinese advertisement of Bayer Aspirin® in 1935
(Source: Zargaj-Reyolds, 2007)

It was thought that advertising in SA had its history from the time that the first settlers arrived in the Cape Colony. Advertising posters were preserved and included the auction of slaves amongst other things (Brewer, 1998: 19). In 1800 the Cape Town Gazette was founded, followed by The SA Commercial Advertiser and the South African Journal in which advertisements were very prominent (Brewer, 1998: 19). In later years opportunities for advertising were realised by enterprising businessmen which resulted in the birth of the advertising agent. Their role was first believed to be that of acting as a representative for the media rather than as a representative of the advertiser. There were some advertising agents or agencies who sold space on behalf of one or several publications but evidence suggests that the first agencies existed to ply their talents to traders in respect of their writing and artistic skills (Brewer, 1998: 20). As time passed, the broking business in SA became more “cut-throat” as more competitive services were introduced which, today, have become the cornerstones of advertising agencies. These competitive services included services such as copywriting and artwork (Brewer, 1998: 20).
In more recent times advertising has become more persuasive in nature (Eisenberg, 2004; Preston, 2005: 5; Raven, 2004: 9). Advertisements are designed and interpreted in a more scientific and psychological manner by using a variety of techniques.

2.3 ADVERTISING AS MARKETING TOOL

Chris Brewer (1998: 7), a SA expert in advertising representing the Media Association of South Africa (MASA), defined advertising in the following over-simplified way: “Advertising is created and produced in order to effect a coming-together of two minds sharing a common purpose; one wishes to sell and the other wishes to buy”. Bob Garfield (2003: 3), advertising’s leading international critic, refers to advertising in a humoristic way in his book and describes it as “fundamentally nothing more complex than communicating a selling idea to a prospective customer”.

Advertising can thus be defined in various ways. Twenty seven years ago advertising was defined by Louis Kaufman (1980: 3) as “any form of nonpersonal presentation of goods, services, or ideas for action, openly paid for, by an identified sponsor”. In 2004 Tellis (2004: 9) defined advertising as “any paid message that a person or organisation delivers to consumers in order to make its offer”. Kaufman (1980: 3) actually based his definition on the definition provided in the Journal of Marketing, volume 12, number 2, published in October 1948. Therefore, whether advertising was defined recently or even 58 years ago, Bob Garfield’s simplistic way of giving meaning to the word “advertising” holds true: “selling an idea to a prospective customer”.

2.3.1 Fundamentals of advertising

In essence, to understand the fundamentals of advertising, the American Marketing Association (AMA) identified four components in its definition of advertising, namely (Belch & Belch, 2004: 16; Vilanilam & Varghese, 2004: 5):
• payment;
• non-individual source or nonpersonal communication;
• identifiable source or sponsor; and
• ideas, products, and/or services.

The paid aspect of advertising in the AMA’s definition reflects the fact that the space or time for an advertising message generally must be bought (Belch & Belch, 2004: 16). However, there are situations where advertising can be free, such as in publicity. This may occur when the media takes an interest in ideas, services, and/or even goods which they consider to be useful to the public (Vilanilam & Varghese, 2004: 6).

The non-individual source or nonpersonal communication component refers to the transmission of the advertising message through the involvement of mass media (Belch & Belch, 2004: 16; Vilanilam & Varghese, 2004: 6). Mass media involves, for example television, radio, and print media such as magazines and newspapers (Clow & Baack, 2005: 61; Truter, 2006: 82; Vilanilam & Varghese, 2004: 10).

The identifiable source or sponsor is the advertiser who pays for the advertising message transmitted to the audience. Another type of sponsorship is when an organisation or company sponsors, for example, a specific event like a high school rugby match. The organisation or company would provide money to, for example, organise the event but in turn gets exposure (Clow & Baack, 2005: 161).

The final component, ideas, products, and services refer to what is advertised by the advertiser or sponsor. All advertisements deal with one or more of these three concepts. The concept of advertising an idea is different than advertising a product or service. AIDS awareness campaigns in which the government tries to warn the public on the dangers of HIV/AIDS can be seen as an example of an idea advertisement (Vilanilam & Varghese, 2004: 7).
2.3.2 Promotional mix

The marketing mix consists of the following well-known four p’s: product, place, price, and promotion (Belch & Belch, 2004: 8; Clow & Baack, 2005: 104). Advertising, however, forms part of one of the six elements of the promotional mix which also include direct marketing, sales promotion, personal selling, publicity, and interactive/Internet marketing (Belch & Belch, 2004: 16). This can be illustrated by the diagram in Figure 2.4. To understand advertising’s role in the promotional mix it is important to know what the other five elements entail and how advertising complements them.

![The promotional mix diagram](image)

**Figure 2.4 The promotional mix**
(Source: Belch & Belch, 2004: 16)

2.3.2.1 Direct marketing

Direct marketing is a form of advertising by which an organisation communicates directly with target customers in order to generate a response and/or a transaction (Belch & Belch, 2004: 18). This is a method of marketing that enhances loyalty to a brand or company rather than to a retailer. Direct marketing programs have the ability to generate greater profits due to the absence of middle channel members (the middlemen) (Clow & Baack, 2005: 61).

*Mass media* often forms part of direct marketing campaigns. It is also known as *mass communication* as a message can be sent to many consumers at one time (Clow & Baack, 2005: 61). Mass media consists of *broadcast media* (television and radio) and *print*
media (newspapers, magazines, direct mail, and billboards) (Belch & Belch, 2004: 143). However, the most common forms of mass media used in direct marketing are television, radio, magazines, and newspapers (Clow & Baack, 2005: 61).

(i) Broadcast media

Television is a unique and powerful advertising medium as it contains the elements of sight, sound, and motion to create a variety of advertising appeals and executions (Belch & Belch, 2004: 286). Radio, in contrast, has a limited sense-appeal as it only contains the element of sound. This broadcast medium, despite its setback, remains an excellent reminder and support medium that is estimated to “touch the lives” of nearly all South African adults (Brewer, 1998: 222).

Television, however, is the most highly desirable advertising medium due to its rate of exposure to consumers. In a survey conducted in 1987 by the South African Broadcasting Corporation (SABC) it was identified that the average person in SA watches 3.48 hours of television per day and 24.36 hours per week (Brewer, 1998: 218). The Television Audience Measurement Survey (TAMS™) conducted by the South African Advertising Research Foundation (SAARF) over a 12 month period (July 2002 to June 2003) also indicated that adults in SA watched television an average of 3.01 hours per day and 21.07 hours per week. This survey also indicated that 67.3% (20.023 million) of the adults in SA watched television on a daily basis during this period (South African Research Foundation, 2007). These figures show that television is an excellent medium to reach many consumers with a single message (Clow & Baack, 2005: 62).

Radio does not have the same degree of consumer exposure as television, but can still be used to convey strong advertising messages as it is a constant companion in peoples’ cars, at home, and even at work (Belch & Belch, 2004: 351; Clow & Baack, 2005: 62). This broadcast medium, however, has no reference capability for listeners and they are often also unable to cope with all the detail present in, for example, advertisements (Brewer, 1998: 223).
Figures identified by the Radio Audience Measurement Survey (RAMSTM) conducted by SAARF over a 12 month period (January 2002 to December 2002) indicated that SA adults listened to the radio an average of 27.12 hours per week. In a similar survey done between July 2002 and June 2003, it was found that SA adults listened to radio an average of 29.54 hours per week (South African Advertising Research Foundation, 2007). These figures indicated that during these times SA adults spent more hours in a week listening to the radio than watching television.

(ii) Print media

Newspapers generally appear daily (for example, Die Burger, The Herald, Daily Despatch) or weekly (for example, Sunday Times and Rapport). This print medium is mostly regionalised which allows for more flexibility and accuracy in target marketing (Brewer, 1998: 208). Newspapers are the largest advertising medium in terms of its total advertising volume. However, this medium has fallen behind television and magazines as a medium for national advertisers. In the USA it was found that only four and a half percent of the estimated $144 billion dollars spent on national advertising in 2002 was spent on national advertising in newspapers (Belch & Belch, 2004: 425).

As a result of newspapers having a sense of “urgency” in its nature, it creates a healthy environment for an “urgent” type of advertisement, for example, an announcement of a sale (Brewer, 1998: 208). For this reason it is usually community pharmacy advertisements that appear in newspapers and not direct-to-consumer pharmaceutical advertisements. In comparison with other media types, it is generally more cost-effective to advertise in newspapers (Brewer, 1998: 208).

However, the disadvantages of this print medium are that it has poor reproduction quality and a short “shelf-life”. Poor reproduction quality is as a result of newspapers having a poor paper quality and also because of the limited use of colour. If the visual appearance of a specific print advertisement is of importance, newspapers should not be the print medium of choice (Belch & Belch, 2004: 420). Newspapers have a short life span as they are generally not kept for longer than a day. This results in advertisements only
having an impact on the day of publication with repeat exposure highly unlikely (Belch & Belch, 2004: 420; Brewer, 1998).

According to the All Media and Products Survey (AMPS™) conducted during a 12 month period by SAARF (January 2002 to December 2002), 17.1% of SA adults read any newspaper on a daily basis whereas 30.8% read weekly newspapers. From July 2002 to June 2003 there was an increase in these figures with 18.6% of SA adults reading newspapers on a daily basis while 31% read weekly newspapers. These results also indicated that there was an increase in daily readership in both males and females as well as in the age group, 16 – 34 years (South African Advertising Research Foundation, 2007).

In contrast to these disadvantages, magazines have excellent reproduction quality and a much longer life span than newspapers (Brewer, 1998: 208; Wells, et al. 1995: 353). Magazines use high quality paper for printing and many colours are used. This print medium has the longest life span of all the media as readers will often page more than once through a magazine (Brewer, 1998: 208). Magazines also have a very high reach potential due to a large pass-along to friends, family, customers, and colleagues (Wells, et al., 1995: 353). Therefore, in contrast to newspapers, advertisements in magazines will have a much longer impact on consumers resulting in increased repeat exposure. A disadvantage may be that most magazines circulate nationally and are not geographically specific (Brewer, 1998: 353). This, however, makes them an excellent medium to expose consumers to direct-to-consumer pharmaceutical advertisements.

The AMPS™ was also conducted and revealed that in the 12 month period, January 2002 to December 2002, there were 40.1% adult readers of any magazines (weekly and monthly magazines) in SA. There was only a slight increase in these figures for July 2002 to June 2003, with 40.7% (12.112 million) SA adult readers of any magazines. The AMPS™ also found that in this period the average of any magazine title (weekly or monthly publication) read by a SA adult was 3.19 titles (South African Advertising Research Foundation, 2007).
2.3.2.2  Interactive or Internet marketing

Interactive or Internet marketing is a form of marketing that has developed from the advances in technology. As the Internet was developed, along came advertising and marketing. Interactive media allows for a back-and-forth flow of information where users can participate in and also modify the form and content of information they receive in real time (Belch & Belch, 2004: 20). Where traditional forms of marketing communication, such as advertising, are usually one-way in nature, this form of marketing allows for a more interactive participation from the consumer (Belch & Belch, 2004: 20). Interactive advertising, along with direct marketing, has the greatest potential for establishing intimacy, initiating dialogue between brand and consumer, as well as for the gathering of information. Interactive advertising’s main advantage is therefore its ability to create dialogue, where in contrast, print media and television deliver a more passive monologue (Landa, 2004: 219). After exposure to such a form of marketing, the consumer can now alter information and images, respond to questions, make inquiries, and make purchases. The Internet is a medium that can be used to execute all elements of the promotional mix (Belch & Belch, 2004: 20).

This form of marketing began with banner advertisements that appeared across computer screens as people visited the World Wide Web. Following this were interstitial advertisements, or the so-called *popups* (Clow & Baack, 2005: 98). These advertisements are viewed as controversial and offensive by many as they force Web browsers to react. However, it was found that popup advertisements were much more effective than banner advertisements. This led to the development of superstitials that work after a browser leaves the Web site or even shuts off the computer in which the advertisement will appear the next time the person logs onto the Internet (Clow & Baack, 2005: 98).

Marketing via the Internet can also be conducted by means of electronic mail (e-mail). Nowadays e-mail advertisements are referred to as *spam* due to the development of a strongly negative connotation towards such advertisements (Clow & Baack, 2005: 98). Clow and Baack (2005: 99) conducted a worldwide Internet survey on the perceptions...
towards the use of these various forms of advertising on the Internet and concluded the following:

- 24% stated that no form of Internet advertising was intrusive or a turnoff;
- 40% found popup advertisements to be a turnoff;
- 28% found e-mail advertisements to be a turnoff; and
- eight percent found banner advertisements to be a turnoff.

Despite these negative perceptions towards the various forms of advertising on the Internet, companies in the USA still continue to use the Internet as a marketing tool. Additionally, a recent study in the USA identified the following interesting statistics which makes the use of Internet advertising even more appealing to companies in the USA (Clow & Baack, 2005: 99.):

- Approximately 42% of Internet users are women and men make up the other 58 %.
- The average age of Internet users is 34.9 years.
- More than 65% of Internet users have household incomes of $50 000 or more per year, compared to 35% of the USA population as a whole.
- 75% of Internet users have attended college compared to 46% of the general USA population.

The SARF conducted the AMPS™ to determine the Internet usage amongst SA citizens. It was estimated that between July 2002 to June 2003 (a 12-month period), 5% (1.496 million) of SA citizens used the Internet on a monthly basis, 3.8% (1.146 million) used the Internet on an average seven day period, while 2.3% (684 000) used the Internet daily (South African Advertising Research Foundation, 2007).

2.3.2.3 Sales promotion

Sales promotion, or consumer promotion as it is also known, is a promotional effort which supplements or coordinates personal selling to increase sales, but which cannot be strictly classified as either. This is a temporary marketing effort that can generate short-
term interest in product purchase (Vilanilam & Varghese, 2004: 186). Belch and Belch (2004: 2) divided sales promotion into two major categories: consumer-orientated and trade-orientated activities. Consumer-orientated sales promotion targets the ultimate user of the product or service. This type of sales promotion includes, for example, rebates, contests (see Figure 2.5), premiums, sampling, sweepstakes, and various point-of-purchase materials. The aim of consumer-orientated sales promotion is to encourage consumers to make an immediate purchase thus stimulating short-term sales (Belch & Belch, 2005: 22). Trade-orientated sales promotion targets the market intermediaries (middlemen) such as wholesalers, retailers, and distributors. Price deals, sales contests, promotional and merchandising allowances, and trade shows are some examples of this type of promotion. Its aim is primarily to encourage the trade to stock and promote a company’s products (Belch & Belch, 2005: 22).

Figure 2.5 Example of a baby competition employed as a consumer-orientated sales promotional technique by a South African pharmaceutical company
(Source: Aspen – What’s News?, 2006: 8)

The major differences between advertising and sales promotion concern their methods of appeal and the value they add to the sale of a product or service (Wells, et al., 1995: 593). These differences are illustrated in Table 2.1.
Table 2.1 Differences between advertising and sales promotion

<table>
<thead>
<tr>
<th>ADVERTISING</th>
<th>SALES PROMOTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Creates image over time</td>
<td>• Creates immediate action</td>
</tr>
<tr>
<td>• Relies on emotional appeals</td>
<td>• Relies on rational appeal</td>
</tr>
<tr>
<td>• Adds intangible value to the product or service</td>
<td>• Adds tangible value to the product or service</td>
</tr>
<tr>
<td>• Contributes moderately to profitability</td>
<td>• Contributes greatly to profitability</td>
</tr>
</tbody>
</table>

(Source: Wells, et al., 1995: 594)

2.3.2.4 Public Relations and Publicity

Public Relations (PR) is a management function which has the task of evaluating public attitudes, identifies the policies and procedures of an individual or organisation with the public interest, and executes a program to earn public understanding and acceptance (Belch & Belch, 2005: GL11). Vilanilam and Varghese (2004: 183) described PR as “all activities and attitudes intended to judge, adjust to, influence, and direct the opinion of any group or groups of persons in the interest of an individual, group, or institution”. It has three key functions (Clow & Baack, 2005: 133):

- monitoring the internal and external public;
- providing positive information to each public that reinforces the integrated marketing plan and advertising direction; and
- reacting quickly to any shift in the position of any of the publics from the desired position.

Publicity, on the other hand, refers to the communication regarding an organisation, service, product, or idea that is not directly paid for or run under identified sponsorship (Belch & Belch, 2005: GL11).
2.3.2.5 Personal selling

The final element of the promotional mix is personal selling. Personal selling is a form of person-to-person communication whereby a seller tries to assist and/or persuade prospective buyers to purchase a company’s product or service or to act on an idea (Belch & Belch, 2005: 24). It involves direct contact between buyer and seller, either face-to-face or through some other form of telecommunication. Direct contact not only allows for communication flexibility, but also provides immediate and precise feedback to the seller (Belch & Belch, 2005: 24).

2.3.3 Main types of advertising

Landa (2004: 41) identified four main types of advertising, namely:

- public service or social advertising;
- cause advertising;
- commercial advertising; and
- guerrilla advertising.

2.3.3.1 Public Service Advertising

Public Service Advertising (PSA) is advertising that serves the interest of the public (Landa, 2004: 41). PSA is a non-commercial form of advertising that is a powerful educational tool capable of reaching and motivating large audiences. It deals with issues such as AIDS (see Figure 2.6), energy and water conservation, religious recruitment and political ideology (Richards, 2004). This form of advertising is generally sponsored by non-profit institutions (see Figure 2.7), civic groups, religious organisations, trade associations, or political groups. In the USA, PSA reached its height during World War I and II under direction of its servant government agencies (Advertising, 2006).
2.3.3.2 Cause advertising

Cause advertising is a particular category of PSA. The difference of cause advertising to PSA is that its commercial nature is maintained to a degree by its affiliation with a
corporation. Cause advertising is used to raise funds for non-profit organisations, is sponsored by corporations and therefore published in paid media (Landa, 2004: 14).

### 2.3.3.3 Commercial advertising

Commercial advertising is the opposite of PSA. It involves a commercial interest rather than advocating a social, political, or religious cause (Richards, 2004). Commercial advertising refers to the selling of brands by informing consumers, brand building, promotion of brands, and endearing brands to consumers. This type of advertising can take the form of a single advertisement, a campaign, or brand building in any conventional medium type, such as direct response, television, radio, the World Wide Web (Internet), or print (Landa, 2004: 41). It can even be used on media such as bus stop benches and the sides of busses, skywriting, wall paintings, trains and its subway platforms (Advertising, 2006).

### 2.3.3.4 Guerrilla advertising

Guerrilla advertising is also known as non-traditional advertising, unconventional advertising, or stealth marketing. When conducted on the Internet it is also known as viral marketing (Landa, 2004: 42). The term ‘guerrilla advertising’ was coined by Jay Conrad Levinson (Guerrilla marketing, 2005). Guerrilla advertising is an unconventional form of advertising intended to get the maximum results from minimal resources (Guerrilla marketing, 2005). This type of advertising “ambushes” the consumer and appears or is placed in unpaid media. It is often seen in public spaces where advertisements do not belong. Examples of where guerrilla advertising can be found are on wine corks, coffee cup sleeves, sidewalk logos, bathroom stalls, or on hotel room keys (Landa, 2004: 42). Figure 2.8 illustrates two examples of guerrilla advertising, an advertisement next to a urinal of the movie, Spiderman 2, and an HIV-awareness advertisement on a bus shelter.
Another example of guerrilla advertising can be seen in Figure 2.9. This is an advertisement which misleads the reader into thinking that it concerns a lost puppy, thereby attracting the necessary attention. It is in fact an advertisement for a day care centre for dogs.

The reason why advertising has become a force to be reckoned with in the marketing world can be attributed to the following three main advantages identified by Belch and Belch (2004: 17):

- Creates brand images and symbolic appeals for a company or brand.
- Acts as a cost-effective method for communicating with large audiences.
- Ability to strike a responsive chord with consumers when differentiation across other elements of the marketing mix is difficult to achieve.
2.4 PHARMACEUTICAL ADVERTISING

Pharmaceutical advertising does not differ greatly from that of the conventional type of advertising people are exposed to on the daily basis. The main, and probably the only difference, is the fact that pharmaceutical advertisements must comply with the various pharmaceutical regulations and ethical considerations regarding advertising. Each country has a set of rules, regulations, and ethical guidelines developed by their respective pharmaceutical authorities. In the USA the Food and Drug Administration (FDA) and the Federal Trade Commission (FTC) regulate pharmaceutical advertisements (Abood & Brushwood, 1994: 7); in Britain the Royal Pharmaceutical Society of Britain and the ASA of the United Kingdom have this responsibility; in SA it is the responsibility of the Medicines Control Council (MCC), the South African Pharmacy Council (SAPC), and the ASA of SA.

There are two sectors of Pharmacy which have to be distinguished, namely the pharmaceutical industry and community pharmacy. These two fields of Pharmacy each
incorporate its own type of advertising. The pharmaceutical industry, as with any large company, will incorporate each element in the promotional mix (refer to Figure 2.4). Rutherford (1993: 7) indicated that pharmaceutical marketing tends to resemble industrial marketing. He stated that personal selling is the main promotional tool used by pharmaceutical companies, followed by sales promotion (Rutherford, 1993: 7). Presently, these statements can be reinforced by astonishing figures obtained by Moynihan and Cassels (2005: 22). They stated that in the USA alone, there were 80 000 people working as sales representatives for various pharmaceutical companies. These sales representatives had an estimated $25 million dollar expenditure per year for sales promotional tools to detail their products to doctors, psychiatrists, pharmacists and other healthcare professionals (Moynihan & Cassels, 2005: 23). Advertising and publicity are also employed by the pharmaceutical industry to create awareness of their products but to a much lesser degree than personal selling and sales promotion (Rutherford, 1993: 7).

The use of advertising in community pharmacies is quite different to that of the pharmaceutical industry. In-store advertisements in community pharmacies are more focused on informing and making customers aware of the availability and price of products as well as to reinforce any special sales. Figure 2.10 is an example of a typical advertisement used by a community pharmacy in the NMM to advertise a medicine’s name, quantity, and product price to the general public. The selling of consumer goods, such as those in community pharmacies, rely more on advertising and sales promotion as opposed to personal selling and sales promotion in the pharmaceutical industry (Rutherford, 1993: 7).

In community pharmacies advertisements are usually self-designed. These types of advertisements are often colourful and creative. It usually advertises a special promotion or informs the customer of the price of a new product. Community pharmacies may in some instances also employ consumer-orientated sales promotion to sell their products. This type of sales promotion is more directed at front shop merchandise such as cosmetics, toiletries, alternative treatments, and unscheduled medicines. Consumer-orientated sales promotion such as rebates, premiums, and sampling of scheduled medicines are (as from 2 May 2002) banned in SA in accordance with Section 18A of the
Medicines and Related Substances Amendment Act 59 of 2002 (South African Pharmaceutical Manufacturer’s Association, 2004). In many community pharmacies competitions such as baby and mother-and-child photo competitions are still used to create awareness and support of the particular pharmacies.

![Table of medications](image)

**Figure 2.10  Example of a typical community pharmacy advertisement**
(Source: Die Burger, 2007: 3)

Mass media is also employed in community pharmacies. However, independent community pharmacies use smaller community and regional newspapers to advertise their products and services. In the NMM community pharmacies will advertise in, for example, The Herald, Die Burger, Apple Express, and UD News which appears daily. Chain store community pharmacies such as DisChem, Clicks, and Shoprite have large advertising budgets and will therefore advertise nationally and may use television, radio, and national newspapers like Rapport and Sunday Times to advertise.

### 2.4.1 Direct-to-consumer advertising

Direct-to-consumer (DTC) advertising is defined as the promotion of prescription drugs by pharmaceutical companies by means of mass media (for example, newspapers, magazines, television (see Figure 2.11), and Internet marketing (see Figure 2.12)) which are directed at the general public (Abood & Brushwood, 1994: 186; SourceWatch, 2006; Wilkes, Bell & Kravitz, 2000: 111). DTC print advertising is defined as “a space that is bought by a company in a newspaper or magazine publication targeted to patients or consumers, or a direct mail communication paid for and disseminated by a company to
patients or consumers, for the purpose of presenting information about one or more of the company's medicines" (Pharmaceutical Research and Manufacturers of America, 2005). However, this form of print advertising does not include the sponsorship of activities (Pharmaceutical Research and Manufacturers of America, 2005). DTC advertising originated in the USA and its history is illustrated in Figure 2.13.

Figure 2.11  A direct-to-consumer advertisement of the cholesterol-lowering medicine, Crestor® seen on television in the USA
(Source: Annals of Family Medicine, 2007)

 Figure 2.12  Example of an antiretroviral advertisement on the Internet
(Source: Drug advertisements, 2001)
Figure 2.13  Timeline indicating the history of direct-to-consumer advertising in the United States of America
(Adapted from:  SourceWatch, 2006; Wilkes, et al., 2000: 111-114)
Although this form of advertising is currently only permitted in the USA and New Zealand although the pharmaceutical industry in Canada and Europe are mounting lobbying campaigns to gain the approval thereof in these respective countries (DES Action Canada, 2002; SourceWatch, 2006; Wilkes, et al., 2000). It is only a matter of time before DTC advertising becomes a familiar sight in SA mass media. Already scheduled medicine advertisements can be seen from time to time in well-known magazines directed at the general public, something which is prohibited by SA pharmacy law (Pharmaceutical Society of South Africa Law Compendium, 2005: MRE – 50).

One of the reasons DTC advertising is prohibited in most industrialised countries is that public safety measures have to be linked to the prescription-only status of medicines (DES Action Canada, 2002).

### 2.4.1.2 Views towards direct-to-consumer advertising

There are two schools of thought regarding DTC advertising, those with opposing views and those who are in favour of such forms of promotion. Most independent researchers, however, view DTC advertising in a negative light. Table 2.2 indicates the arguments for and against DTC advertising.

Ironically, studies indicating the proposed advantages of DTC advertising were paid for or sponsored by pharmaceutical companies or advertising agencies. A survey conducted in New Zealand in 2006 validates this bias tendency (Ministry of Health of New Zealand, 2006). A sample of 110 people representing members of the public, healthcare professionals, pharmaceutical companies, governmental agencies, advertising agencies, and academia were asked to view their opinions towards DTC advertising. As could be expected, the results indicated that the largest proportion of participants who were not concerned or opposed to DTC advertising were pharmaceutical companies and advertising agencies (Ministry of Health of New Zealand, 2006).
Table 2.2 Arguments for and against direct-to-consumer advertising

<table>
<thead>
<tr>
<th>ARGUMENTS FOR</th>
<th>ARGUMENTS AGAINST</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Effective as marketing strategy which shows exponential growth</td>
<td>• Do not show a net benefit to the public health system</td>
</tr>
<tr>
<td>• Allows for interaction with healthcare professionals</td>
<td>• Treat prescription medicines as normal day-to-day consumer goods though they can be harmful, even when properly used</td>
</tr>
<tr>
<td>• Cultivates a healthy lifestyle</td>
<td>• Result in pressure on healthcare professionals to prescribe medicines unnecessary</td>
</tr>
<tr>
<td>• Effective in increasing prescription volumes</td>
<td>• Presented in a slant and emotive manner down-playing risks and enhancing benefits</td>
</tr>
<tr>
<td>• Inform public of new medicines</td>
<td>• Do not provide objective information on risks, benefits, and options to assist consumers in participating in healthcare decisions</td>
</tr>
<tr>
<td>• Help patients identify conditions most appropriately managed by pharmaceuticals and reduces under treatment</td>
<td>• Promotes medicalisation of normal health and the aging process</td>
</tr>
</tbody>
</table>


2.4.1.3 Forms of direct-to-consumer advertising and products offered

In the USA, and in all probability, in New Zealand, DTC advertisements can take on the following forms of advertising (Wilkes, et al., 2000):

(i) Health-seeking advertising

Health-seeking advertisements are thought to educate consumers about diseases or medical conditions. Such advertisements do not mention the names of the medicine. Figure 2.14 illustrates an advertisement that is thought to educate consumers about high cholesterol.
Figure 2.14  Health-seeking advertisement regarding cholesterol tests
(Source: Mintzes, 2006)

(ii) Reminder advertising

Reminder advertisements inform patients about the medications available for treatments. These advertisements indicate the name of the medicine as well as other minimal information but do not mention anything about the medicines’ use, effectiveness, or safety. Figure 2.15 is an example of a controversial reminder advertisement for the treatment of severe acne in females that has failed to respond to any other treatments. This advertisement did not reveal the treatment’s true adverse drug reaction profile publicised in various independent studies. Studies warned of its potential risk to cause fatal blood clotting (Mintzes, 2004).

(iii) Product-specific advertising

Product-specific advertisements mention the medication by name, describe its therapeutic use(s), and make representations about their effectiveness and safety. A vast majority of DTC advertisements fall within this category.
It is also important to understand the categories of products offered to consumers in the form of DTC advertising. DTC advertisements mainly advertise the following three categories of medicines (Mintzes, 2004; Wilkes, et al., 2000):

- **Lifestyle medicines**

Lifestyle medicine advertisements advertise its cosmetic or lifestyle benefits to consumers. Such advertisements do not have an impact on the long-term outcome of a serious illness. Examples of such advertisements found in the USA are Claritin® (for allergies), Viagra® (for impotence), and Propecia® (for hair loss).

- **Prevention medicines**

Prevention medicines are used to reduce the likelihood that disease complications may occur. Examples of such medicines advertised are for conditions such as high cholesterol, osteoporosis, and coronary heart disease.
• **Chronic disease medicines**

Chronic disease medicines treat, for example, diseases like diabetes, asthma, anxiety disorders, and depression.

**2.4.1.4 Direct-to-consumer advertising as marketing tool**

It cannot be argued that DTC advertising is an effective marketing tool to reach the masses. DTC advertising definitely shows exponential growth as can be proved by various figures of such expenditures. Figure 2.16 illustrates the billions of dollars spent on DTC advertising in the USA from 1997 to 2005. It was estimated that the total percentage increase in DTC advertising expenditure for these nine years was 296.4%, whereas the average annual percentage increase was 19.6% (SourceWatch, 2006). Furthermore, Table 2.3 illustrates the advertising expenditure of the most heavily promoted medicines in the USA for 2005.

These figures on the DTC advertising expenditure prove that consumers in the USA are bombarded by DTC advertisements. To put the figures (for the year 2000) spent on pharmaceutical advertising in perspective, Table 2.4 compares the advertising expenditure of the drug, Vioxx® (anti-inflammatory and antirheumatic medicine), to that of other world famous consumer products. What amount of medicine sales resulted from such advertising campaigns needs to be seen but it can be assumed that there should be a significant number of sales as a result of these enormous expenditures.

The irony of these figures is that in 2004 Vioxx® was withdrawn from the worldwide market due to causing life threatening cardiovascular side effects in the USA (Holford & Burne, 2006: 21). This was despite warnings from research results that dated back as far as 1998 which were conveniently and quietly ignored by the manufacturer. Following this, three more trials reinforced the dangers of this medicine but, once again, the findings were ignored (Holford & Burne, 2006: 21). This raises the speculative question that if Vioxx® was not as heavily advertised as shown by these figures, over prescribing would have been reduced, resulting in fewer deaths related to cardiovascular side effects.
Figure 2.16  Spending on direct-to-consumer advertising in the United States of America from 1997 to 2005

(Source: Adapted from SourceWatch, 2006)

Table 2.3  Most heavily promoted medicines in the United States of America for 2005

<table>
<thead>
<tr>
<th>MEDICATION</th>
<th>INDICATION</th>
<th>COMPANY</th>
<th>$ MILLION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lunesta™</td>
<td>Hypnotic</td>
<td>Sepracor</td>
<td>$ 227.3</td>
</tr>
<tr>
<td>Nexium™</td>
<td>Anti-ulcer treatment</td>
<td>AstraZenica</td>
<td>$ 204.9</td>
</tr>
<tr>
<td>Vytorin™</td>
<td>Cholesterol-reducing agent</td>
<td>Merck / Schering-Plough</td>
<td>$ 161.5</td>
</tr>
<tr>
<td>Crestor™</td>
<td>Cholesterol-reducing agent</td>
<td>AstraZenica</td>
<td>$ 158.6</td>
</tr>
</tbody>
</table>

(Source: SourceWatch, 2006)

Table 2.4  Comparison between the advertising costs of Vioxx®, Pepsi®, and Dell computers in 2000

<table>
<thead>
<tr>
<th>PRODUCT ADVERTISED</th>
<th>SPENT ON ADVERTISING ($ MILLION)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vioxx®</td>
<td>$ 160</td>
</tr>
<tr>
<td>Dell computers</td>
<td>$ 160</td>
</tr>
<tr>
<td>Budweiser® beer</td>
<td>$ 146</td>
</tr>
<tr>
<td>Pepsi®</td>
<td>$ 125</td>
</tr>
</tbody>
</table>

(Source: National Institute of Health Care Management, 2001: 5)
Even if there are some positive views for DTC advertising, most independent researchers indicate that such a form of advertising is not in the best interest of consumers, healthcare professionals, and the public health system. Kemper and Mettler (2002: 52) stated that DTC advertising delivers “spoonful of sugar” messages that promise “quick relief, improved health, and longer life” but that it does not provide the consumer with important information such as risks, costs, and alternatives for each medicine advertised. DTC advertising should firstly be thoroughly investigated before being approved by countries where it is still prohibited.

2.5 PSYCHOLOGICAL IMPACT OF ADVERTISING

Walter Dill Scott (whose research commenced in 1901) was one of the first psychologists to apply psychology to business practices such as advertising (Kneessi, 2002; Wozniak, 1999). The notion of psychology being applied to advertising in fact started before this by Harlow Gale, a then psychologist at the University of Minnesota. Gale started utilizing laboratory experiments in the assessment of the attention value of various characteristics of advertising in 1896 (Berger, 2000: 4; Wozniak, 1999). However, no significant interest was invested in his studies and therefore no impact on advertising practices was made (Wozniak, 1999).

In his research, Scott found that advertising had one major function, that is, to influence the minds of people. He stated that for advertising to be effective it must be able to create a thought in the consumer’s mind to purchase the product without raising any interfering thoughts. To achieve this he linked the basic psychological functions of memory, habit, volition, instinctive action, attention, feeling, and sympathy to an advertisement’s design (Kneessi, 2002; Wozniak, 1999).

With regard to the psychological function, sympathy, Scott realised that consumers perceive a similarity between themselves and the advertisement they see and that the greater the degree of sympathy drawn from it, the higher its likelihood to influence the power of suggestion. Furthermore, Scott suggested that a person’s feelings can be divided into two categories, pleasure and pain. With pleasure people become suggestible
and therefore more likely to see everything in a favourable light. In contrast to this, pain causes people to refuse suggestion. Pain results in people not being easily influenced as well as becoming suspicious towards things proposed. Scott suggested that it was important for these findings to be borne in mind when designing advertisements (Wozniak, 1999).

In essence, advertisements should elicit pleasure and not pain. These early findings indicated that psychology plays a specific and definite role in advertising. This supports the notion that it is important to explore the role of psychology in current advertising practices.

The section below coincides with the following four aspects regarding the psychological impact of advertising:

- consumers’ decision-making processes regarding purchasing;
- persuasive nature of advertisements and its impact on consumers;
- role of emotion in persuasive advertising; and
- preattentive processing of advertisements.

### 2.5.1 Consumers’ decision-making processes regarding purchasing

To understand the psychological impact of advertising on consumers, focus has to be placed on the stages of the consumer decision-making process and the relevant internal stages of the psychological process during purchasing. The stages of these two processes can be represented by the basic model illustrated in Figure 2.17.

*Problem recognition* (see Figure 2.17 (a)), occurs when the consumer perceives a need and becomes motivated to solve a problem (Belch & Belch, 2004: 107). This is not always a cognitive event. A person may or may not actively think of a need but yet still experience that need. The person may, for example, walk past a bakery, smell and see some cookies, which may then trigger a desire or need to have them. They will then act on this desire or need by entering the bakery to buy the cookies (Clow & Baack, 2005:
129). When choosing self-medication, the consumer will experience the symptoms of the illness, and then attempt to evaluate the severity in order to finally make a decision of treating their illness. Pharmaceutical marketers will use this step to, for example, inform the consumer that he or she could have a vitamin deficiency (Advertising: An important role in responsible self-medication in Canada, 1996). Once a need has been recognised, the person can start searching for information.

(a) Stages in the consumer decision-making process

![Diagram of consumer decision-making process]

(b) Relevant internal psychological processes

![Diagram of internal psychological processes]

Figure 2.17 Basic model of consumer decision-making
(Source: Belch & Belch, 2004: 105)

The second step, information search, usually begins internally where the consumer recalls mental images of products that might fulfil his or her needs. Past experiences of how a product has satisfied a need may be used to recall a brand that was used. If that resulted in a positive purchase experience the purchasing decision may be repeated. The information search then stops at the internal level but if it was a negative experience, or if the internal search did not yield enough information, the consumer will conduct an external search (Clow & Baack, 2005: 95). The external search will involve the search of external sources such as personal sources (for example, friends, relatives, or co-workers), public sources (for example, newspaper or magazine articles and television reports), personal experience (for example, handling, examining, testing products, or samples thereof), and commercial sources (for example, advertising information or the Internet) (Belch & Belch, 2004: 112).
The next step is *alternative evaluation*. During this step the consumer evaluates various purchase possibilities (Clow & Baack, 2005: 69). Criteria will be set to conduct this evaluation of various purchase possibilities whereby the benefits of one product can be weighed against another (Belch & Belch, 2004: 115; Clow & Baack, 2005: 69).

The fourth step is the *purchase decision*. After consumers have evaluated their various purchase possibilities, they will develop a purchase intention towards a certain brand (Belch & Belch, 2004: 120). Once consumers are totally satisfied with a specific brand, the purchase will occur (Clow & Baack, 2005: 135). It is important to remember that a purchase decision will not always lead to a purchase. Interventions to the actual purchase can occur and can include the attitude of others, anticipated situational influences (for example, family income or product cost), as well as unanticipated situational influences (for example, poor sales assistance) (Truter, 2006: 16).

The final step in the consumer decision-making process is the *post-purchase evaluation*. The consumer will compare the performance level of the brand purchased to their expectations. If the consumer’s expectation was met, or even exceeded, satisfaction has occurred. If the consumer’s expectation was not met, dissatisfaction has occurred. (Belch & Belch, 2004: 120; Truter, 2006: 17) Post-purchase evaluations affect future behaviour of consumers or businesses. Satisfaction will create additional purchases or even positive word-of-mouth communication, whereas dissatisfaction leads to brand switching or negative word-of-mouth. (Clow & Baack, 2005: 126.)

In order to understand why consumers buy, the internal psychological processes (see Figure 2.17(b)) of the consumer needs to be focused upon. Consumers will buy when they have a specific motive to do so. *Motivation* is based on Maslow’s well publicised *Hierarchy of Needs* which consists of the following five basic levels of human needs, arranged in a hierarchy from the most basic needs of a human being (Belch & Belch, 2004: 109; De Beer, Rossouw, Moolman, Le Roux & Labuschagne, 1998: 214):
• **Physiological needs**, for example, basic level of primary needs to survive.
• **Safety needs**, for example, security and safety against physical harm.
• **Social needs**, for example, a sense of belonging, and love.
• **Esteem needs**, for example, self-fulfilment.
• **Self-actualisation needs**, for example, self-development and realisation.

Perception consists of the following processes: (1) how consumers sense external information, (2) how they select and attend to various sources of information, and (3) how this information is interpreted and given meaning (Belch & Belch, 2004: 113). These steps show that perception plays a major role in the second step of the consumer decision-making process, information search. Perception occurs when stimuli are registered by one of the following five senses of a human: vision, taste, smell, touch, and hearing (Hoyer & MacInnis, 2001: 92).

With print advertising, all focus will be aimed at the sense of vision. Colour is an important factor in visual perception (Hoyer & MacInnis, 2001: 92). Hoyer and MacInnis (2001: 92) found research that suggests that colour determines the visibility of stimuli. Colour used in advertising also has the ability to influence people or consumers’ psychological responses and moods (Hoyer & MacInnis, 2001: 92).

**Attitude**, from an advertising perspective, drives action (Clow & Baack, 2005: 11). The positive or negative feelings consumers may harbour following a purchase are of vital importance, especially when marketers want to ensure future sales (Belch & Belch, 2004: 117; Clow & Baack, 2005: 11).

**Integration** plays a major role in the third step of the consumer decision-making process, alternative evaluation. It is the way in which a product’s knowledge, meanings and beliefs are combined to evaluate two or more alternatives. Analysis of this process focuses on the different types of decision strategies consumers use to decide among the various purchase alternatives (Belch & Belch, 2004: 119).
2.5.2 Persuasive communication

Advertising is a much more persuasive marketing tool today than it was before. The most common goal of an advertisement is to persuade (Clow & Baack, 2005: 120). It is therefore imperative to understand what persuasion is and what role it plays in advertising.

*Persuasive communication* is described as a process by which people attempt to influence the beliefs or actions of others (Persuasive Communication, 2007; Locker & Kaczmarek, 2007: 22). The Oxford Advanced Learners Dictionary (1994: 924) refers to persuasion as “a cause to believe or convince”. Tellis (2004: 112) defined persuation in advertising as “a change in opinion, behaviour, or attitude due to exposure to the advertisement”. The study of persuasion dates back to the ancient Greeks, who were the first to systematise the use of persuasion, calling it ‘rhetoric’. Aristotle defined rhetoric as “the faculty of observing in any given case, the available means of persuasion”. He stated that persuasion can be based on a source’s credibility (ethos), emotional appeals (pathos), or logical appeals (logos), or a combination of these (Larson, 2004: 11).

The persuasive process can be illustrated by Figure 2.18 which represents the SMCR (source, message, channel, and receiver) model. This model is similar to the basic communication model in that it contains all the components of the latter model, namely a source, message, receiver, and feedback (Gard, 2000: 5). Figure 2.18 portrays how a television advertisement persuades consumers.

The SMCR model consists of the following components (Larson, 2004: 16):

- A source (S) (or persuader). This is the encoder (sender) of the message where the code can be verbal or non-verbal, visual or musical, or some other modality.
- A message (M) which conveys the source’s meaning.
- A channel (C) carries the message and may also have distracting noise.
- A receiver (R) (or persuadee), who in turn has the responsibility of decoding the message. The receiver also has to try to sieve out channel noise and adding his or her own interpretation.
2.5.2.1 Elaboration Likelihood Model

Advertisements are thought to persuade consumers in various ways. The psychologists, Richard Patty and John Cacioppo, developed a framework in 1985 which illustrates the various routes in which consumers can be persuaded by advertisements (Belch & Belch, 2004: 158; Tellis, 2004: 112; Vidal, 1998). They have generated a model, the *Elaborated Likelihood Model* (ELM) (see Figure 2.19), which referred to how likely consumers think elaborately about advertisements when exposed to them (Belch & Belch, 2004: 158; Tellis, 2004: 112). The ELM model shows that the elaboration likelihood functions via two elements, motivation and the ability to process the message (information) of the advertisement (Belch & Belch, 2004: 158). Tellis (2004: 114) defines *motivation* as “the willingness of the individual to evaluate a message”. It may occur as a result of the advertisement being engaging, brand loyalty, the person’s needs and arousal levels, the importance of the item advertised, and personal relevance. *Ability* refers to the consumer’s “competency to engage in the required mental effort” (Tellis, 2004: 114). Belch and Belch (2004: 159) states that a consumer’s ability to evaluate a message will also depend on whether he or she has the opportunity to do so.
Whenever a consumer has the motivation to elaborate (process) the message of the advertisement, he or she will follow either a central route of persuasion or a peripheral route.
route of persuasion. This will depend on the consumer having the ability to process the advertisement’s message or not (Tellis, 2004: 114).

The **central route** will be followed when the consumer is capable of processing the advertisement’s message. By following this route the consumer will be persuaded by “strong” arguments. A strong argument has the ability to persuade the consumer by appealing to reason and relying on evidence (Belch & Belch, 2004: 159; Tellis, 2004: 112; Vidal, 1998). The consumer will then cognitively process the advertisement’s message where, if the argument is favoured, a positive attitude towards the advertisement will be formed. This advertisement will then typically exhibit a persuasive nature. Conversely, when the consumer is not in favour of the advertisement’s message, a negative attitude towards the advertisement will be formed. The advertisement therefore did not succeed in its persuasiveness (Belch & Belch, 2004: 159).

The **peripheral route** will be followed when the consumer lacks the ability to process the advertisements’ message (Tellis, 2004: 113). As the consumer follows this route he or she will be more responsive to cues associated with the information provided by the advertisement. Examples of persuasive cues that can be used in the peripheral route are the structure of the advertisement, presence and fame of endorsers, the costliness of the advertisement, music or imagery used, and the number of arguments included (as opposed to the strength of the argument observed in the central route) (Belch & Belch, 2004: 160). Such positive cues may result in a consumer forming a positive attitude towards the brand of the product advertised even though he or she is unable to process the information of the advertisement. Opposing this are negative cues (for example, low-budget advertising, endorsers lacking credibility, or advocating extreme positions or beliefs) which may result in the consumer rejecting the advertisement without even considering the information provided by it (Belch & Belch, 2004: 160; Tellis, 2004: 113; Vidal, 1998).

In a situation where the consumer is not motivated to process the advertisement’s information as well as not being able to do so, the consumer will enter into a passive state of receptivity (*passive processing*) to the advertisement or he or she will not attend to it.
In such a state advertisers can use drama or humour in the advertisement to gain the consumer’s attention (Belch & Belch, 2004: 160; Tellis, 2004: 113). However, Tellis (2004: 120) suggested that factors such as ‘mere exposure’ and the use of soft-sell messages have a very effective role in attracting the consumer’s attention. *Mere exposure* refers to the repetitive exposure of a stimulus which can lead to the preference of it, even if not remembered. In advertising such stimuli can, for example, be a certain jingle, slogan, or logo. When a consumer is repeatedly exposed to advertisements containing such stimuli, he or she may start liking the stimuli thereby being more favourable towards the advertisement (Tellis, 2004: 118). *Soft-sell messages* are messages which are subtle in nature. Subtle messages will allow consumers to interpret advertisements differently or can result in the advertisement being suggestive by means of persuasion. Advertisements that employ soft-sell messages do not make direct requests for action or change (Tellis, 2004: 120).

According to Tellis (2004: 113) the ELM model shows that consumers are not always thoughtful nor are they always mindless when making decisions and forming opinions about advertisements. This model is a valuable tool in identifying reasons for the inclusion of certain components such as humour, photographs of celebrities, or certain logos or slogans in advertisements.

### 2.5.3 Emotion in advertising

Persuasion is also concerned with emotions (Wells, et al., 1995: 280). *Emotion* is a mental activity which is defined as a state of arousal, a feeling of any kind – hate, jealousy, fear, anger, joy, and love. The James-Lange theory of emotion stated that emotion results from physiological reactions to certain events (Van Wagner, 2007). A person’s feelings about a product, brand or service may be just as important as what he or she knows about it (Wells, et al., 1995: 280). It is an effective and powerful marketing tool used as a persuasive communicator in advertising. Although being distinct from thought, it is aroused through a sequence of thoughts triggered by certain stimuli such as a sad letter resulting in a feeling of sadness (Tellis, 2004: 147).
Emotion is also employed in pharmaceutical advertising. In her study, *Direct-to-consumer advertising: Healthy education or corporate spin?*, Melissa Raven (2004: 9) identified the following powerful emotional factors employed in DTC advertisements:

- value of health (peoples’ own health or that of their loved ones);
- fear of disability and death;
- responsibility of a person to take care of his or her own health and that of their loved ones;
- self-consciousness, vanity, and shame; and
- vulnerability of people who, for example, are ageing or ailing.

### 2.5.3.1 Modes of persuasion by emotion

Advertisements can employ various stimuli to evoke emotion, for example, humour, pictures, and a sequence of events. When a consumer becomes aroused as a result of reacting to such stimuli, he or she will take action by means of one of the following modes (Tellis, 2004: 148):

#### (i) Associative mode

Tellis (2004: 148) describes the associative mode as a method in which emotions are aroused by means of stimuli which are only “tangentially related” to a product advertised. This means that an advertisement can present, for example in a picture, a scenario that arouses a certain emotion without stating the benefits of the advertised product. Such a method attracts the consumer’s attention as well as associating the company’s name with that emotion. Tellis (2004: 149) stated that the associative mode causes persuasion through a better recall ability of the name of the brand as well as its association with a specific emotion, rather than with the attributes of the brand. Figure 2.20 illustrates how this mode causes persuasion by means of the arousal of an emotion.
(ii) Implicit mode

The implicit mode (see Figure 2.21) involves advertisements which visualise "real" characters and interesting "plots" to capture the attention of consumers in order to arouse an emotion. The emotion aroused by such an advertisement lowers their defences against its message. Such advertisements play on the consumer’s emotion by allowing him or her to develop empathy towards the characters and eventually believe the message. Another important factor to keep in mind is that this mode of persuasion is implicit, causing these advertisements not to contain any arguments or product attribute claims.

(iii) Explicit mode

The explicit mode (see Figure 2.22) involves advertisements that employ forms of stimuli which make a point and as an end result arouse the consumer’s emotion (sympathy).
Conversely to the implicit mode, advertisements employing the explicit mode incorporate attribute claims and also provide arguments as support. Tellis (2004: 148), however, points out that “persuasion occurs primarily through the arousal of emotion rather than the force of the argument”. He also explained this mode with the example of an antiabortion advertisement which graphically showed the destruction of the foetus thus making a strong argument against abortion. This advertisement made its point not by an explicitly strong argument but by the emotion of guilt that results from the consequences of abortion.

![Figure 2.22 Explicit mode of persuasion by emotion](Source: Tellis, 2004: 149)

It is evident from these three modes how emotion can be employed by advertisers to persuade their consumers. Emotion is also employed in pharmaceutical advertisements to achieve the effect of persuasion, especially when dealing with themes such as illness and disease.

### 2.6 PREATTENTIVE PROCESSING OF ADVERTISEMENTS

Another concept that makes an important psychological impact in the processing of information, such as advertisements, is preattentive processing. Hoyer and MacInnis (2001: 85) in their book, *Consumer Behavior*, defined preattentive processing as “nonconscious processing of stimuli in peripheral vision”. This refers to the ability to process information from the peripheral vision even if the person is not aware of attending to such information. A person devotes just enough attention to an object in peripheral vision to process something about that object. Due to the amount of attention being so limited, the person is not aware that he or she is attending to and processing it (Hoyer & MacInnis, 2001: 85).
Preattentive processing of information depends on the following two factors (Hoyer & MacInnis, 2001: 85):

- whether stimuli appearing in peripheral vision are words or pictures; and
- whether stimuli are placed in the right or left visual field, referring to whether it is placed to the right or the left side of the object focused on at that time.

This process is therefore based on the physiological phenomenon, hemispheric lateralisation. Hemispheric lateralisation refers to the fact that the brain is divided into two hemispheres, the left and right cerebral hemisphere, with each hemisphere having specific functions (Solomon, Schmidt & Adragna, 1990: 458; Tortora & Grabowski, 2000: 471). This phenomenon can be exhibited by the diagrammatical representation in Figure 2.23.

Figure 2.23  Hemispheric lateralisation
(Source: Hoyer & MacInnis, 2001: 86)
The right cerebral hemisphere is thought to be best at processing holistic information such as music, pictures, spatial information, forming inferences, and drawing conclusions (Hoyer & MacInnis, 2001: 86). Functions such as artistic awareness, recognition of emotional content of language, as well as pattern perception are also thought to be processed in the right cerebral hemisphere (Tortora & Grabowski, 2000: 471). The left cerebral hemisphere is thought to be best at processing units that can be combined such as counting, forming sentences and words, and also processing unfamiliar words (Hoyer & MacInnis, 2001: 86). Tortora and Grabowski (2000: 471) also added functions such as reasoning, ability to use and understand sign language, as well as various scientific skills.

When an advertisement or a billboard, for example, is placed on the right side of the attended focal (right visual field) (see Figure 2.23), processing of this information takes place in the left hemisphere and vice versa (Hoyer & MacInnis, 2001: 85). Stimuli people directly focus on (attended focal) are processed by both hemispheres. It is therefore interesting to realise from the topic of hemispheric lateralisation that stimuli such as pictures in advertisements are most likely to be preattentively processed if placed to the left of a magazine article. This will ensure that this picture can be processed by the right hemisphere which is best for processing visual stimuli. Therefore stimuli such as brand names or advertisement claims are most likely preattentatively processed if placed in the right visual field in order to be processed by the left hemisphere (adapted from Hoyer & MacInnis, 2001: 85).

Although preattentive processing will not be focused upon as such in this study, its relevance to the study of advertisements is important, in as much as it may provide valuable reasons as to why certain components such as pictures, numbers or words are used and placed in certain areas within advertisements.

2.7 CONCLUSION

This chapter identified the fundamental aspects of advertising, its role in the pharmaceutical environment, and the psychological impact of advertisements on consumers. Chapter three, *Science of advertising*, will consist of an in-depth
investigation into the study of symbols used in advertising, a process called semiotics. Together, the information in these two chapters will lay the foundation necessary to decode the pharmaceutical advertisements forming the basis of this study.
CHAPTER 3
SCIENCE OF ADVERTISING

3.1 INTRODUCTION

Pharmaceutical advertising has become more than just a way of marketing medication, medical devices, or healthcare advice. It has become a science in its own right where more thought is put into this form of advertising. Advertising in general has become a discipline where techniques such as semiotics and colour psychology are used in order for the persuasive nature of advertisements to come to the forefront.

As consumers (health care professionals and the general public) are exposed on a regular basis to pharmaceutical advertisements, it is of vital importance to have an understanding of how techniques such as semiotics and colour psychology are incorporated. This is necessary for the purpose of this study as these concepts assisted in determining whether pharmaceutical advertisements have the possibility of being deceptive or misinterpreted.

3.2 SEMIOTICS

Semiotics is a complex concept and has a vast array of similar interpretations which are adapted from the concept of Ferdinand de Saussre’s semiology (Myers, 1977: 137). It had its origin from an American philosopher, Charles Saunders Pierce, at the beginning of the century (Myers, 1997: 137).

Semiotics is defined as the “study of signs and symbols, especially in writing, and of what they mean and how they are used” (Oxford Advanced Learners Dictionary, 1989: 1150; Concise Oxford English Dictionary, 2006: 1308). More formally put by Greg Myers (1997: 212) in his book, Words in Ads, semiotics is the academic field devoted to the study of a general system of signs. Jean-Marie Floch (2001: 2), a French semiotician, referred to semiotics as a “process that attends to anything that has or could possibly have meaning”.
Semiotics has unnoticeably advanced into a research form in today’s day and age. It is different from traditional qualitative research. Qualitative research is an “inside-out perspective” in which psychological phenomena are obtained from people. Psychological phenomena that can be obtained from qualitative research are, for example, perceptions, beliefs, and attitudes of people (Lawes, 2004). Rachel Lawes (2004), a semiotician from Britain, states, however, that semiotics takes an “outside-in” approach. Semiotics, in principle, asks how these psychological phenomena “got into the person’s head” in the first place (Lawes, 2004).

According to Lawes (2004) perceptions, beliefs, and attitudes come from the surrounding culture in which respondents participate. Semiotics takes the culture as the object of the study and not the consumer, as is the case with qualitative research (Lawes, 2004). In semiotic terms culture refers to how people communicate with each other, consciously or subconsciously, through, for example, language, visual images, and music (Belch & Belch, 2004: 142). This is relevant to market research as semiotics, therefore, is a methodology developed for understanding packaging, advertising, and various kinds of marketing literature (Lawes, 2004). Belch and Belch (2004: 142) stated that semiotics plays an important role in marketing communication as it assists marketers in their understanding of how consumers may interpret words, gestures, myths, signs, symbols, products or services employed in advertising.

Umberto Eco stated that semiotics concerns everything that can be seen as a sign (Chandler, 2005a). Semiotics, however, is not widely institutionalised as an academic discipline and for this reason involves many different theoretical structures and methodological tools (Chandler, 2005a). As with semiology, semiotics takes the form of words, images, sounds, gestures, and objects (Chandler, 2005a). Sauzure’s semiology is a science which studies the role of signs as a part of social life, whereas Pierce believed that semiotics was the “formal doctrine of signs” which was closely related to logic (Chandler, 2005a; Cook, 1992: 69; Hoenish, 2005). Pierce also stated that semiotics not only referred to signs in everyday speech, but was also concerned with something that stood for something else in some respect or capacity to a specific person (Chandler, 2005a; Cook, 1992: 69). He also declared that every thought is a sign (Chandler, 2005a).
3.2.1 Semiotic concepts

To understand semiotics, various concepts have to be defined. Terms such as signs, denotation and connotation, index, icons, symbols, encoding, and decoding are continually employed in semiotic studies and thus need to be defined.

3.2.1.1 Signs

The words *semiology* and *semiotics* were derived from the Greek word *semeion* which means *sign* (Chandler, 2005a). As people communicate, they operate via an agreement about what various images, words, sounds, or gestures mean. When, for example, a word or an image has had some agreed meaning attached to it, it becomes a *sign* (Lawes, 2004). Images, words, sounds, or gestures have no intrinsic meaning and only becomes a sign when a person attaches a meaning to them (Chandler, 2005a; Lawes, 2004). According to Saussure anything can be a sign as long as someone interprets it as *signifying* something, referring to or standing for something other than itself (Chandler, 2005a). Things are interpreted as signs on an unconscious level by relating such a sign to familiar systems of convention (Chandler, 2005a).

Saussure defined a sign as a two-part system which is composed of (Chandler, 2005b):

- A *signifier* – the form which the sign takes, or in a more modernistic view, the material (or physical) form of the sign – something that can be seen, touched, smelled, heard, or tasted.
- The *signified* – the concept it represents.

Saussure used Figure 3.1 to explain the relationship between these two concepts and signs (Chandler, 2005b). Figure 3.2 and Figure 3.3 provide an example that simplifies the two-part system used to define signs (Chandler, 2005b). In Figure 3.2 the word *tree* is used to illustrate Suassure’s two-fold system. The letters used to spell tree is therefore seen as the signifier whereas the concept (not the actual image) of the tree will be the signified (Chandler, 2005b). Figure 3.3 identifies the relationship of a sign (the rose) to
the signifier (the letters spelling the word *rose*) and the signified (the concept of a rose) (Underwood, 2003).

![Figure 3.1 The two-fold system of a sign](image)

(Source: Chandler, 2005b)

![Figure 3.2 Example that explains the two-fold system of a sign](image)

(Source: Chandler, 2005b)

3.2.1.2 Denotation and Connotation

In relation to the concept of a sign, two additional concepts also need to be referred to, namely denotation and connotation. These two concepts describe the relationship
between the signifier and the signified. According to Chandler (2005b), meaning (for example, a reader attaching meaning to an advertisement) includes both denotation and connotation.

![Figure 3.3 A rose as a sign, signifier, and signified](Source: Underwood, 2003)

Denotation is the basic, most fundamental form of a sign (Underwood, 2003; Semiotics and advertisements, 1994). It is the literal meaning of a sign, for example, the word tree literally signifies a kind of plant or the word rose which signifies a kind of flower. In contrast, connotation is referred to as the socio-cultural and personal association of the sign (Underwood, 2003). It is related to, for example, the reader’s class, age, gender, or ethnicity.

Connotation can therefore be seen as “signifying signs” used as signifiers for a secondary meaning or as the secondary cultural meaning of signs (Chandler, 2005b; Cook, 1992: 101; Semiotics and advertisements, 1994). In Figure 3.4 the word rose (applied as signifier 1), and picture thereof (applied as signified 1), can again be used as an example of connotation where it can have a secondary meaning which signifies passion. A sign is thought to be more open to interpretation in their connotations than their denotations as is evident in the example of the word rose (Underwood, 2003).

3.2.1.3 Index, Icon, and Symbols

Pierce suggested three additional types of signs which are found to be useful for the analysis of advertisements. These types of signs are the index, icon, and symbol
(Chandler, 2005a; Cook, 1992: 69; Myers, 1997: 137; Underwood, 2003). Table 3.1 identifies and provides definitions to each of these three types of signs.

Figure 3.4 The rose and its connotation
(Source: Underwood, 2003)

Table 3.1 Definition of the three types of signs

<table>
<thead>
<tr>
<th>Three additional types of signs</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Index (indexical sign)</td>
<td>An index is a sign where the signifier is caused by the signified, for example, natural signs (smoke which signifies a fire), medical symptoms (pain or a rash), and indexical words (‘this’, ‘there’, ‘here’, ‘that’). With an indexical sign the signifier is not arbitrary but physically or casually connected to the signified.</td>
</tr>
<tr>
<td>Icon (iconic sign)</td>
<td>An icon (iconic sign) is a sign in which the signifier is perceived as resembling or imitating the signified, for example, a picture or a cartoon.</td>
</tr>
<tr>
<td>Symbol (symbolic sign)</td>
<td>A symbol is referred to as an arbitrary or conventional relationship between the signifier and the signified. Symbolic signs are therefore signs where this relationship is purely conventional or culturally specific. Examples of symbolic signs are language in general (phrases, words, punctuation marks), numbers, and traffic signs.</td>
</tr>
</tbody>
</table>

(Adapted from: Chandler, 2005b; Changing minds, 2007; Cook, 1992: 69; Myers, 1997: 137; Underwood, 2003)

Myers (1997: 137) explained these terms by means of the following Coca Cola® poster advertisement that appeared on a bus shelter: a cold can (with water droplets on its side) of Coca Cola® that almost fills the whole frame with a single questioning word below it – “Thirsty?” Due to a person’s complex process of image processing, the picture of the
Coke® can is perceived as a can because of the fact that it looks as smooth, cylindrical, and shiny as a can. Because the poster is flat and five feet high, it is realised that it is not actually a can but a sign representing a can and therefore known as an iconic (an icon) relationship of signifier and signified, a casual relationship of resemblance (Cook, 1992: 69; Myers, 1997: 139). The can in the Coca Cola® advertisement showed droplets of water on its side thereby indicating to the observer that the can is cold. The relationship between the signifier (the water droplets) and the signified (cold can) is not of resemblance because of the fact that these droplets is caused by the cold and therefore said to be indexical (an index) (Myers, 1997: 139). With the word “Thirsty?” the signifier consists of eight letter shapes that does not look like thirst and also does not result from it. This signifier is associated with the meaning needing a drink only by a convention of English speakers (Myers, 1997: 139). The connection is thus seen as arbitrary and these signs are therefore called symbols (Myers, 1997: 139).

Visual images can consist of all three types of signs identified by Pierce (symbolic-, iconic-, and indexical signs), or symbols and signs only, or a symbolic element only (Moriaity, 1995). Table 3.2 illustrates this tendency by the use of everyday signs. Professor Moriaity (1995), a specialist in the field of visual communication, stated that in the case of, for example print advertising containing pictures, all three types of signs are mostly included.

Myers (1997: 139) realised that symbols can only be seen by those who share the same culture. He raised a critical point that iconic and indexical signs are often seen as naturally connected to the thing they represent but that these are still seen as signs. These signs are often open to multiple interpretations (Myers, 1997: 139). If this then is the case, signs seen in advertisements, can often be open to multiple interpretations which can easily lead to misinterpretation.

### 3.2.1.4 Encoding and Decoding

Other important concepts to understand in the semiotic process is encoding and decoding. The Oxford Advanced Learner’s Dictionary (1989: 395) defines encoding as a method of
“putting, for example, a message into code”. Decoding is defined as a “method of finding the meaning of, for example, a message” (Oxford Advanced Learner’s Dictionary, 1989: 310; Concise Oxford English Dictionary, 2006: 372). Encoding and decoding form part of the basic communication model (Belch & Belch, 2004: 139; Clow & Baack, 2005: 35; Du Plessis & Petersen, 2003: 6). Figure 3.5 illustrates the role encoding and decoding plays in the communication process.

Table 3.2  Visual images identifying the type of signs implemented

<table>
<thead>
<tr>
<th>Example</th>
<th>Identification and interpretation of signs</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="no_smoking.png" alt="Image" /></td>
<td>The “no smoking” sign consists of a <strong>symbolic</strong> red circle (<strong>the signifier</strong>) on a white background. The sign signifies that <strong>something is forbidden</strong> (<strong>the signified</strong>). The signified is reinforced by the red bar across the circle which represents an <strong>indexical</strong> sign that states: “You cannot do this (smoke) here”. The picture of a cigarette is not an actual cigarette but the white and black figure with smoke coming from it resembles a cigarette and is therefore said to be the <strong>iconic</strong> sign.</td>
</tr>
<tr>
<td><img src="triangle.png" alt="Image" /></td>
<td>To most people this triangle will resemble a road sign meaning “watch out for the workers ahead”. The meaning of the triangle is therefore seen as arbitrary and is therefore the <strong>symbolic</strong> sign. Inside the triangle is a picture that represents a person at work. Again, since this is only a picture resembling a picture of a person at work, it is seen as an <strong>iconic</strong> sign. Here, culture (especially culture in third-world countries) can play a role in the interpretation of the iconic sign. For example, in some cultures the female is the worker of the family and the iconic picture will therefore represent a female at work and not a male as will usually be implied.</td>
</tr>
<tr>
<td><img src="speed_limit.png" alt="Image" /></td>
<td>This is a sign that will be familiar to all road users as it indicates a speed limit not more than 30 kilometres per hour. It has an arbitrary meaning and is therefore seen only as a <strong>symbolic</strong> sign.</td>
</tr>
</tbody>
</table>

(Source:  Chandler, 2005b; Cook, 1992: 69; Myers, 1997: 210; Semiotic and advertisements, 1994; Underwood, 2003)

Encoding therefore is a process in which a **source** (for example, an advertiser) incorporates thoughts, ideas, or information into symbolic forms (by means of, for example, words, symbols, or pictures) to represent a **message** that will be delivered to a **receiver** (for example, a consumer) (Belch & Belch, 2004: 141; Clow & Baack, 2005: 135; Hoyer & MacInnis, 2001: 276). The receiver, in turn, decodes the message. This
means that the receiver transforms the message he or she received back into thought and interprets it (Belch & Belch, 2004: 143; Clow & Baack, 2005: 58; Du Plessis & Petersen, 2003: 6).

![Basic communication model illustrating the role of encoding and decoding](Adapted from: Belch & Belch, 2004: 139; Clow and Baack, 2005: 35; Du Plessis & Petersen, 2003: 6)

Contemporary semioticians give a programmatic interpretation of these two concepts. They defined encoding as the creation of texts and decoding as the interpretation thereof. This interpretation is in actual fact intended to emphasise the importance of semiotic codes involved, which then highlights their social functions (Chandler, 2005a). In semiotic terms decoding involves the basic recognition and comprehension of what a text says and also the interpretation and evaluation of its meaning with reference to relevant codes (Underwood, 2003).

Judith Williamson was the first to use the phrase “decoding advertisements” when she published a book with the same title in 1978 (Myers, 1997: 53). She saw communication as a simple decoding process when applying semiotics to advertising (Myers, 1997: 53). Her approach was to analyse the real meaning of words and images within advertisements, and the real world to which the unreal images of the advertisement refer. Williamson’s assumption was that reality is relatively distinct from fiction and also that it
is morally superior (Myers, 1997: 63). This was explained in her book by the analysis of two varieties of Chanel® perfumes, Chanel® No. 5 (see Figure 3.6) and Chanel® No. 19. In one of these advertisements Catherine Deneuve appeared and in the other, Margaux Hemingway. Williams found both women to be signifiers – Deneuve represented “flawless French beauty” whereas Hemingway represented the essence of being a “young American” (Myers, 1997: 63; Williamson, 2005: 28).

**Figure 3.6 Advertisement of Chanel® No. 5**
(Source: Holmes, 2002)

Figure 3.7 provides a visual explanation of how a reader decodes the Chanel® No. 5 advertisement. Williamson suggested that the reader will recognise the face of Deneuve as an individual and stated that this actress will be seen as more different than other celebrities (Cook, 1992: 64; Holmes, 2002; Williamson, 2005: 27). The reader will make the connection that Deneuve is, for example, beautiful, sophisticated, and elegant. This is the ultimate association that can be made of the perfume. Therefore, a referent system of differentiation occurs where the product is differentiated by the signified meaning of the actress associated with it (Cook, 1992: 64). This linkage is created through differentiation which is viewed as “natural”. According to Williamson (2005: 11) this is fundamentally what ideology consists of.

Williamson (2005: 11) said that there is an assumption that what people see in these advertisements is natural and that they see the link as part of the way things are.
Furthermore, she said that the “form of advertisements is a part of ideology, and involves a false assumption which is the root of all ideology, namely that because things are as they are, this state of affairs is somehow natural, and must ‘make sense’ simply because it exists” (Williamson, 2005: 11). Therefore, the assumption the reader makes of this advertisement is in effect the idea held (the ideology) of Deneuve, and its link to the perfume (Cook, 1992: 64; Hook, 2003).

**Figure 3.7 Decoding of the Chanel® No. 5 advertisement according to Williamson**  
(Source: Holmes, 2002)

Williamson furthermore developed a model (see Figure 3.8) to give a clearer understanding of how the reader decodes the advertisement, and what the role of the producer of the advertisement is. This model identifies that the reader will form a meaning of the advertisement based, mainly, on his or her referent system and ideology (Holmes, 2002).

The referent system (see Figure 3.8) is the consumer’s system of signs from which the product draws its image. Advertisers will then appropriate such a referent system to generate sign value (Holmes, 2002; Hook, 2006). Williamson (2005: 97) identified four main referent systems which can be identified in advertisements.
The four main referent systems identified are (Holmes, 2002; Williamson, 2005: 97):

- **Cooking nature**

Nature is seen as the primary referent of a culture (Holmes, 2002). In accordance with Williamson’s (2005: 103) theories, advertisements “cook” nature by illustrating the transformation of raw materials to the final product. Figure 3.9 illustrates this raw and cooked nature Williamson referred to by using a vitamin advertisement as example. This illustrates the transformation of the “raw” fruit peel into the “cooked” final product (the vitamin).

Williamson (2005: 120), however, stated that “cooking nature” does not only refer to natural objects but can also refer to sex. She explained that with sex the cooking does not only refer to nature or the view thereof but also of passion and humans’ image thereof.
Therefore, sex becomes a referent system that is always referred to or hinted at but it is always concealed behind its own references and thus never appears raw (Williamson, 2005: 120).

**Figure 3.9** Vitamin advertisement illustrating the referent system, *cooking nature*  
(Source: Williamson, 2005: 110)

- **Back to nature**

This type of referent system returns to what is natural (Williamson, 2005: 123). *Nature* is used by society in two ways: with technology in order to create goods, and with ideology, to create symbols of what is natural. These two ways are then juxtaposed so that the meaning of nature can be transferred to the goods advertised (Holmes, 2002). Figure 3.10 shows how nature (the lemons, honey, and green leaves) is used to reinforce the idea that this product is made of natural ingredients.

- **Time**

*Time* is a referent system which tells the story of the past and the future in advertisements. It places the reader in a specific moment in time by the incorporation of certain sequences
into the advertisement (Holmes, 2002; Williamson, 2005: 152). The advertisement for a diuretic medication (see Figure 3.11) can be interpreted as a picture of female farm workers, probably in the late 1950s, a time when such medication was not available. This generic medication is, however, now available to the reader. This advertisement illustrates how time can be used as referent system.

Figure 3.10 Advertisement illustrating the use of nature as a referent system
(Source: Huisgenoot, 2007: 62)

• Magic

Magic is a referent system which represents the process of “doing things” in the advertisement. It is stated to be a “pivot around which misrepresentation may be produced” (Holmes, 2002). Magic is therefore seen as a transformational referent system which assists as a “short cut” between other referent systems (Williamson, 2005: 138).
As can be seen from Figure 3.8, ideology has an impact in the formation of the consumer’s referent system. Ideology is a complex process of how the consumer’s worldly experiences are structured (Hook, 2003). It is defined as “a set of ideas held by a particular group or person” (Oxford Advanced Learner’s Dictionary, 1989: 616). Williamson (2005: 11) suggested that readers of advertisements make the assumption of what is seen as being natural. The ideology therefore presented is then seen as being true. Ideologies are therefore codes which reinforce or are congruent with structures of power. It creates forms of “common sense” which are observed in everyday life (Holmes, 2002; Hook, 2003; Semiotics and advertisements, 1994; Underwood, 2003).

There are five factors that play a role in the development of the referent system which affects the reader in attaching a meaning to the advertisement (see Figure 3.8), namely appellation, the mirror phase, identity, ego, and desire (Holmes, 2002). Williamson (2005: 40) derived the term appellation from Louise Althusser’s theory of interpellation. Interpellation is defined as the way in which ideology “calls out” to readers (Holmes, 2002). Appellation therefore occurs when there is an exchange between the reader and
the subject of the specific advertisement (Hook, 2003). The reader is forced to put himself or herself in the place of the person being spoken to individually, and if this is accepted, their individuality will give the advertisement meaning (Holmes, 2002; Hook, 2003; Williamson, 2005: 40).

The mirror-phase is a term coined and investigated by the psychoanalyst, Jacques Lacan, in 1936 (Changing minds, 2007). This was identified as a phase in which a baby (six to 18 months of age) sees himself or herself in the mirror and realises that he or she is seeing their own image. Lacan’s theory established that consciousness is created and not inherited. He identified, via the mirror phase that consciousness is created as a child (Williamson, 2005: 60). The mirror-phase is implemented in modern media by means of, for example, showing a picture in an advertisement, allowing the reader to project themselves (Changing minds, 2007). Williamson (2005: 60) also shares the belief that the mirror-phase theory plays a role in advertising. In accordance with Lacan’s theory, she states that the child who sees himself or herself in the mirror recognises who he or she is and who they are not (Williamson, 2005: 61). This creates two areas: the imaginary (where someone exists) and the symbolic (where difference exists). When applying this theory to advertising, the images (the imaginary) are capable of representing the symbolic (Holmes, 2002).

Identity refers to “who or what a person or thing is” (Concise Oxford English Dictionary, 2006: 707). Williamson states that people differentiate themselves from other people by what they buy. She argues that what people buy is linked to their identity. The Oxford Advanced Learners’ Dictionary (1989: 387) also provides a profound definition of the term ego and defines it as a person’s “perception or experience of himself in relation to other people or the outside world”. This therefore will have an impact on a reader’s ideology.

Desire is an emotion in which the person “wishes for or wants something” (Oxford Advanced Learner’s Dictionary, 1989: 325; Concise Oxford English Dictionary, 2006: 388). It is the need to possess. Emotion is triggered when a person sees or thinks about something that he or she wants. Desire is a useful emotion when used in persuasive
communication. As advertising is a form of persuasion, desire can therefore be implemented as a useful tool in advertisements (Changing minds, 2007).

The decoding advertisements model (see Figure 3.8) also indicates the role the producer of the advertisement has on the encoding thereof and two other factors affecting both the producer and the advertisement. Hermeneutics and semiotic referents are the two factors that can affect both the producer and the advertisement (Holmes, 2002).

Williamson (2005: 71) defines Hermeneutics as the “translation of one language to another”. This process involves the cultivation of the ability to understand something from someone else’s viewpoint as well as keeping the cultural and social forces influencing their outlook. Williamson uses hermeneutics in the sense of deciphering a code or to translate from one language to another. She explained that the deciphering process attempts to provide understanding to the advertisement (Williamson, 2005: 71).

The semiotic referents employed by the producer of the advertisement are borrowed from the examples of referent systems and then developed into a more semiotic form. From Figure 3.8 it is evident that the producer also affects both the processes of hermeneutics and that of semiotic referents and vice versa (Holmes, 2002).

Williamson’s decoding advertisements model depicts how consumers provide meaning to advertisements. It clearly demonstrates the role semiotics plays in the encoding of advertisements. From this model a strong psychological undertone can be detected.

### 3.2.2 Application of semiotics in pharmaceutical advertisements

The proceeding section will illustrate how semiotics is applied in pharmaceutical advertisements. There will be focused on the decoding practices employed by the following researchers: Goldman, Montagne, Floch, Ferner, and Scott.
3.2.2.1 Decoding by Goldman and Montagne

Goldman and Montagne (1986) focused on the decoding of antidepressant drug advertisements. They critically decoded and analysed the encoding practices employed in an advertising campaign led by the pharmaceutical company, CIBA (Goldman & Montagne, 1986). This advertising campaign was for the antidepressant, Ludiomil® (active ingredient: maprotiline) that appeared in 1980 (Drug Digest, 2007). Later on they also investigated Mead Johnson’s advertising campaign for another antidepressant, Desyrel® (active ingredient: trazodone), which appeared approximately a year after the introduction of Ludiomil® (Drug Digest, 2007; Goldman & Montagne, 1986).

Their research indicated that the advertisements used in this campaign employed “highly abstract visual metaphors and symbols” to address antidepressants (Goldman & Montagne, 1986). They also stated that these advertisements were designed in such a way as to generate carry-over symbols. Carry-over symbols are cognitive connections between named drug entities and the meaning of abstract visual images (Goldman & Montagne, 1986). It must be remembered that a symbol, in accordance with Pierce’s semiotic theories, is when a signifier has an arbitrary or conventional association with a meaning known to a group or class of people (for example, to English speaking people) (Chandler, 2005b; Semiotics and advertisements, 1994; Underwood, 2003). In essence, Goldman and Montagne’s aim was to interpret the visual impact and symbolic meanings of these advertisements (Goldman & Montagne, 1986).

Goldman and Montagne also identified the usual layout of antidepressant advertisements which can be universally applied to any pharmaceutical advertisement. They found that the layout for these advertisements consisted of the following components (Goldman & Montagne, 1986):

- **signifying image** refers to photographs or artistic drawings which are usually set within a frame to set it off;
- **drug name**, or name and image of the package design; and
- **a framing caption** that connects the meanings of the signifying image and the brand.
Their method of analysis of the advertisements that appeared in the Ludiomil® campaign can be divided into two categories, visual categories and lexical categories. The lexical category deals with the analysis of the “words or vocabulary of a language” appearing in these advertisements whereas the visual category deals with the analysis of pictures to illustrate something (Concise Oxford English Dictionary, 2006: 820 & 1616).

The Ludiomil® pre-introductory advertisement (see Figure 3.12) consists visually of a face mask protruding from a flat desert-like planer surface with a dewy, red rose growing out of this surface directly above the face mask (Goldman & Montagne, 1986). It can be seen that the eyes and face are emphasised, as these body parts are usually seen as the most expressive. This enhances the signifying “power of the expressive dimension”. The visual representation of the vacant, distract stare of the eyes, the serious sombre pursing of the lips, and the facial cracks guides the reader in defining the human condition of depression (Goldman & Montagne, 1986).

![Figure 3.12 Pre-introductory advertisement for the antidepressant, Ludiomil®](source: Goldman & Montagne, 1986)

This image is joined by the lexical component of the advertisement, “For the mind depressed...”, as a means of exploiting the expressive code. It assists the reader in the path of defining depression. In this framing caption there is no verb and the sentence is also not closed off allowing the reader to ponder further on this human condition (Goldman & Montagne, 1986). The next phrase, “CIBA is working to improve the
“treatment” confirms that this company has been working on developing a newer antidepressant. It alerts professionals about a new drug that will be better than the others in its class, as is indicated by the word, “improve”. As this is a pre-introductory advertisement, and due to Ludiomil® not being FDA-approved yet at that time, the medicine’s name was not mentioned.

The rose may suggest hope, a new beginning, or personal growth where there was only a barren, desert-like depression. Within the human culture a rose is given for love, compassion, or just for something special that may have occurred in someone’s life. If such a connotation is attached to the rose in this advertisement, it could mean emotional or spiritual vitality where there was only a parched desiccated soul before (Goldman & Montagne, 1986). Thus, true to Pierce’s definition of a symbol, this red rose can then be seen as a symbol (Chandler, 2005b). According to Goldman and Montagne the rose has a cultural image of use as an aesthetically appealing, emotionally uplifting symbol. Therefore, this rose’s connotation is that of culture and emotion (Goldman & Montagne, 1989).

Goldman and Montagne also identified a contrast within this advertisement: a dew-laden rose, a life-affirming gesture, against a background of dry, cracked, barren and imprisoning crust symbolising a depressed mind. This contrast thus indicates a promise of a new and effective therapeutic treatment for depression (Goldman & Montagne, 1986).

They also analysed the introductory advertisement for the Ludiomil® campaign (see Figure 3.13) and found that the symbolic rose is employed as a carry-over symbol as it was used in the pre-introductory advertisement (see Figure 3.12) as well as all the upcoming advertisements in this campaign. In the introductory advertisement the visual aspects shifted from the barren, desert-like representation of depression to a single eye surrounded by darkness. This represents the human eye, again, as a signifying image which continues to exploit the reader’s cultural interpretation of the expressivity of the eye. But the eye is surrounded by total darkness which is transformed into a metaphor for mental depression. This is now not just an eye, but the ‘mind’s eye’ which signifies
human consciousness and emotion. The eye is also indicated as a perceptual mechanism – its pupil dilated and recording light (Goldman & Montagne, 1986).

Figure 3.13 Introductory advertisement of Ludiomil®
(Source: Goldman & Montagne, 1986)

The lexical components of this advertisement introduce the reader to the new drug, its name, as well as the active ingredient, maprotiline HCl (Drug Digest, 2007). It also provides a brief list of key attributes. Attribute two (“the first tetracyclic antidepressant”) and three (“a new generation antidepressant that goes beyond the tricyclics”) are, according to Goldman and Montagne, unnecessary. Attribute three is said to be “ideologically loaded” which could lead to readers being mislead. The phrases, “a new generation antidepressant” and “goes beyond” evoke the “referent system of modern science”, and play on its legitimacy. As with the pre-introductory advertisement (“for the mind depressed”), this advertisement allows for further interpretation of the phrase “goes beyond”. This phrase is seen as “gratuitous” since there is not much difference between Ludiomil® and other tricyclic antidepressants steriochemically. Ludiomil® is a four ring molecular structure where tricyclic antidepressants consist of a three ring molecular structure. Thus the phrase, “goes beyond”, may invite the reader yet again to misleading interpretations (Goldman & Montagne, 1986).

Goldman and Montagne found that advertisers of psychotropics (antidepressants) seem to prefer the use of “binary oppositions” to convey a meaning of mental health and depression. Their investigation of these two advertisements reinforced this fact by identifying the following binary oppositions (Goldman & Montagne, 1986):

New Ludiomil
maprotiline HCl
Safety with optimal effectiveness the first tetracyclic antidepressant
A new generation antidepressant that goes beyond the tricyclics
Rarely encountered cardiovascular reactions
Fewer, less severe anticholinergic side effects
Symptomatic relief within the first week in some patients

CIBA
• the distinction between dryness and moisture (the desert as opposed to the dewy red rose) – non-vitality versus vitality seen in the pre-introductory advertisement; and
• darkness counter posed to lightness – depression versus non-depression seen in the introductory advertisement.

In the advertisement following the introductory advertisement of Ludiomil®, the advertisement causes the reader to see that, when this antidepressant makes its presence felt in its manifestation by the rose, the background lightens as compared to the dark background in the introductory advertisement. It can therefore be seen that these three advertisements symbolise therapeutic progress (Goldman & Montagne, 1986).

Goldman and Montagne’s research reinforces Rachel Lawes’s belief that semiotics is a study of the consumer’s culture as is the case with the carry-over symbol used in the Ludiomil® advertisements (Lawes, 2004; Goldman & Montagne, 1986). This in fact reinforces her understanding that people communicate by means of culture with each other through, for example, visual images. The pharmaceutical company, CIBA, therefore communicates culturally to their consumers by means of a visual image, the red rose.

3.2.2.2 Decoding by Floch

Another semiotician, the Frenchman, Jean-Marie Floch, also analysed antidepressants. He analysed 130 (Floch, 2001: 79) advertisements representing the commercial communications on these medicines. Floch developed a semisymbolic system to analyse such advertisements. A semisymbolic system involves a coupling between expression and content of a language representing, in this analysis, discourse about patients, their psychological states, as well as restoration of their health (Floch, 2001: 75).

He also found that, on further investigation of the plastic expression and figurative dimensions of the visual aspects of these advertisements, that this discourse was constructed by means of a specific encoding process. This type of encoding was formed
by linking the category, *euphoria versus dysphoria*, which represented the overall content of these advertisements (Floch, 2001: 75).

Floch identified 12 visual categories that constituted the expressional content of these advertisements: categories of values and colours, of composition, and of techniques or *styles*. These 12 categories are (Floch, 2001: 75):

- **Clear versus dark**

As with the Ludiomil® advertisement used by CIBA, the Sédatonyl® advertisement (see Figure 3.14) illustrates an anxious and frustrated female, represented in dark (black), contrasted by her becoming clear (white). This colour change occurs as a result of the female taking the medicine and developing a ‘piece of mind’.

![Figure 3.14 Advertisement of Sédatonyl®](image)

(Source: Floch, 2001: 83)
• **High versus low**

In the Sédatonyl® (see Figure 3.14) advertisement, a topological representation is provided on paper by means of the top figure, the initial dysphoric state, and a bottom figure, the final resultant euphoric state.

• **Symmetrical forms versus dissymmetrical forms**

The Sédatonyl® advertisement (see Figure 3.14) portrays calm and security that is restored by the resemblance of a yoga position, the “lotus” position, to an isosceles triangle. The dissymmetrical form is represented by the irate woman and the symmetrical form represented by the female in the calm, lotus position.

• **Shaded versus contrasting**

The Laroxyl® advertisement (see Figure 3.15) illustrates this category by means of a person shaded by a dark cube, whereas a stretched arm contrasts the shaded area.

![Laroxyl advertisement](image)

**Figure 3.15 Laroxyl® advertisement**
(Source: Floch, 2001: 89)
• **Monochromatic versus polychromatic**

Floch explained that this category refers to an advertisement where one part is only in grey or black tone (one colour) and the contrasting part in bright colours (many colours). Figure 3.16 illustrates how this category can be incorporated in an advertisement of an antidepressant found in South Africa. In this advertisement the depressive state is depicted by photographs in a grey and black tone, whereas the healthy mental state is depicted by a colour photograph.

![Figure 3.16](image)

**Figure 3.16** Monochromatic and polychromatic aspects incorporated in an advertisement for a leading antidepressant medication  
(Source: Osman, 2006c: 41)

• **Continuous lines versus discontinuous lines**

The advertisement for Dipiperone® (see Figure 3.17) illustrates a human figure with a bird (possibly a dove) holding a twig (which could be an olive branch) in its beak sitting on the human’s head. This image is sketched by using only thin, continuous lines. The continuous lines together with the dove and the olive branch can represent a relative non-
dysphoric (peaceful) state. Another advertisement may, for example, have the word “anxiety” written in jagged (discontinuous) letters reinforcing the word’s meaning.

Figure 3.17 Dipiperon® advertisement
(Source: Floch, 2001: 80)

- Thin lines versus thick lines

Floch stated that an advertisement can, for example, consist of a picture drawn in thin lines, whereas the medicine’s name is written in thick, dark lines. This ultimately causes the medicine’s name to stand out. Figure 3.18 illustrates how this category is incorporated in an advertisement for an oral anaesthetic ointment sold in South Africa. In this advertisement the drawings, as well as all the important attributes, are in bold lines to attract attention.

- Definite planes versus vague planes

The Anafranil® advertisement (see Figure 3.19) plays with the perception of depth in which a woman is depicted with a vague, blurry face trapped in a house (representing the depression) looking through a window wanting to escape (longing for an euphoric or calm life).
Figure 3.18 An oral anaesthetic ointment depicting the category of thick lines versus thick lines
(Source: You, 2006c: 56)

Figure 3.19 Anafranil® advertisement
(Source: Floch, 2001: 82)
• **Single forms versus multiple forms**

In the advertisement, Atrium\(^\circledast\) 300 (see Figure 3.20), an “anti-tremor tranquiliser for the chronic excessive drinker”, a series of brandy snifters were placed in a row, one behind another, to provide the multiplied effect of the original, single form. Here, according to Floch, the multiple forms symbolises an alcoholic person losing his or her brandy as a result of the alcohol-induced tremors. This is depicted by the perception of the alcohol level in each snifter decreasing from front to back which is as a result of the multiple form.

![Atrium® 300 advertisement](figure3.20)
(Source: Floch, 2001: 86)

• **Simple forms versus complex forms**

Floch gave the example of an advertisement promoting the muscle relaxant effect of the antidepressant medicine depicted by means of a rope knotted in a complex way and then being untied. The rope therefore represents a group of muscles in a knot (the complex form) which can then be untied (the simple form) by the medicine when taken. Figure 3.21 illustrates how this category is employed in an advertisement for the treatment of...
Irritable Bowel Syndrome (IBS). In this advertisement the bowel is in a knot (the complex form). Here the simple form (bowel untied) that results after taking this medicine is not illustrated but left up to the reader’s imagination.

Figure 3.21 Advertisement for the treatment of Irritable Bowel Syndrome illustrating the use of the simple versus complex form category
(Source: Sales representative handout from Novartis, 2006)

- **Pictorial techniques versus graphic techniques**

Floch’s explanation for this category was that in some instances a drawing of an anxious person can be found in one half of the advertisement, and in contrast to this, a photograph of the person enjoying life on the opposite side.

- **Layout in conjunction versus layout in disjunction**

Pragmazone® 25 (see Figure 3.22) illustrates, in the top half of the advertisement, the disjunctive state in which social or family ties are broken. In contrast to this representation, this drug offers to restore the disjunctive state as is depicted by the bottom halve of the advertisement where the family is happily together.
3.2.2.3 Decoding by Ferner and Scott

Ferner, a consultant physician, and Scott, a principle pharmacist, investigated the covert meanings of symbols used by pharmaceutical advertisers to persuade readers of medical journals. They identified the following methods used by pharmaceutical advertisers to achieve this goal (Ferner & Scott, 1994):

- Advertising by contagion

When the pharmaceutical advertisers want to inspire a product with a quality desired by prescribers or users, they will link such a product to symbols that portrays those qualities. In the advertisement of a cephalosporin antibiotic, Zinacef® (see Figure 3.23), a smashed clay pigeon was used to portray power, immediacy, and accuracy. Ferner and Scott (1994) suggested that this advertisement represents an antibiotic that will “smash” infection.
• Polarity of choices

With this technique pharmaceutical advertisers offer a series of limited choices to prescribers, often introducing an element of anxiety. The advertisement for the Hormone Replacement Therapy (HRT), Prempak®-C (see Figure 3.24), colourfully illustrates (to the left) a blister pack of hormone replacement tablets. To the right, a black and white picture of a wheelchair can be seen. The two choices illustrated leave the prescriber with an unpleasant question: “Would you rather prescribe this drug, or condemn your patient to a wheelchair?” (Ferner & Scott, 1994).

• Ourselves and others

In this direct approach, it is illustrated how the targets of advertising, in this case a general practitioner, wish to see themselves. This advertisement for Ciproxin® (see Figure 3.25), a fluoroquinolone antibacterial, shows a photograph of a female general practitioner presenting her in an attractive, kind but firm, and intelligent way. Ferner and Scott (1994) suggest that people want to aspire to such an image, and now that she relies on this antibiotic herself, a persuasive message is created.
Figure 3.24  Advertisement of Prempak®-C illustrating polarity of choice
(Source: Ferner & Scott, 1994)

Figure 3.25  Advertisement of Ciproxin® illustrating ourselves and others
(Source: Ferner & Scott, 1994)
Although Ferner and Scott’s research did not delve deeply into the science of semiotics, their simplistic findings identified the ease with which symbols in advertisements can evoke feelings by having complex and multiple meanings. In their conclusion they stated that components such as visual images, words, colours, and messages implemented in pharmaceutical advertisements play an important role in persuading the reader to buy, use, or prescribe a given medicine.

### 3.3 COLOUR PSYCHOLOGY

A wide variety of pharmaceutical advertisements, whether directed at consumers or healthcare professionals, employ colour to make these advertisements more attractive and appealing. The advertisement seen in Figure 3.26 illustrates how colours are incorporated to create an attractive and appealing advertisement. The use of colour is a marketing skill that employs a wide variety of deeper psychological and symbolic meanings and it is therefore of great importance to understand and investigate why certain colours are used in advertising.

The late 19th century saw the invention of colour lithography. In Italy, France, Germany, as well as later on in England, posters were a wide-spread form of engaging, colourful advertising (Landa, 2004: 3). Colour, when employed in advertising, is used to provide realism, establish moods, build broad identity, and importantly, to attract attention (Wells, et al., 1995: 474). Moreover, John Miner (2007) on his website, Color Secrets Revealed, stated that colour will have a dramatic effect on the physical and mental well-being, morale, sales, and improving productivity. It was proven by researchers that advertisements employing colour attracts more attention than those without colour (Wells, et al., 1995: 474). Colour is also thought to affect people psychologically, emotionally, and physically (Hoyer & MacInnes, 2001: 92). It is stated that colour has a psychological language that speaks to moods and symbolic meanings (Wells, et al., 1995: 474).
The most common misconception is that colour is thought only as a purely visual phenomenon but colour is light and light is a source of life (Wells, *et al.*, 1995: 474). Hoyer and MacInnes (2001: 92) believed that colour is an important factor in visual perception. Colour determines whether people see stimuli. Sir Isaac Newton found that colour is light and that spectral hues are its components (Van Wagner, 2006). He determined this in 1666 when he shone a pure white light through a prism and found that the light separates into all of the visible colours. (Van Wagner, 2006). In scientific terms colour is the principle cue to composition, in other words, it is the first aspect being registered when assessing anything (Wright, 2006).

**Figure 3.26** Advertisement incorporating various bright colours  
(Source: Osman, 2006a: 25)
A specific colour can be described according to the following three dimensions (Hoyer & MacInnes, 2001: 92):

- **Hue**

  Broadly defined, *hue* refers to a variety or shade of colour that is dependent on its wavelength (Oxford Advanced Learner’s Dictionary, 1989: 607; Concise Oxford English Dictionary, 2006: 693). More scientifically, it refers to the pigment found in that specific colour. Two broad categories or colour hues can be found, namely *warm colours* (for example, red, orange, and yellow) and *cool colours* (for example, green, blue, and violet).

- **Saturation**

  *Saturation*, also known as *chroma*, refers to the richness of the colour. For example, one can refer to a *pale* pink and a *deep* pink.

- **Lightness**

  *Lightness* refers to the depth of tone in the colour. For example, a saturated pink may have a lot of lightness (a fluorescent pink) or a lot of darkness (a mauve).

Colour psychology is the field of study that is devoted to the analysis of the effect of colour on human behaviour. Colour perception is said to be somewhat subjective but what holds true is that colour effects have universal meaning (Van Wagner, 2006). It is also difficult to define an exact science for colour psychology as there are subjective meanings involved, both at personal and cultural level. Colour psychologists found that warm colours generally encourage activity, excitement, and also reflect a mood of brightness and happiness (Hoyer & MacInnes, 2001: 93; Wells, *et al.*, 1995: 475). Cool colours, in contrast, are found to be more soothing and relaxing, and are also found to be aloof, calm, severe, reflective and intellectual (Hoyer & MacInnes, 2001: 93; Wells, *et al.*, 1995: 475). Table 3.3 and Table 3.4 summarise the psychological and subjective meaning of the two categories of hues found, namely warm colours and cool colours.
Table 3.3 Psychological interpretation and symbolism of warm colours

<table>
<thead>
<tr>
<th>COLOUR</th>
<th>PSYCHOLOGICAL INTERPRETATION AND SYMBOLISM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Red</td>
<td>Red is a bright, warm, intense colour that evokes strong emotions and is associated with energy, war, danger, strength, power, determination, as well as passion, desire, and love. It is thought to enhance human metabolism, increase the respiratory rate, and also increase blood pressure. Red is often used to evoke erotic feelings (for example, red lips, red nails, red-light districts). It is also a colour that is used as an accent colour to stimulate people to make quick decisions. In Internet advertisements red is often employed for the ‘buy now’ or ‘click here’ buttons.</td>
</tr>
<tr>
<td>Orange</td>
<td>Orange is an energetic colour that is associated with joy, sunshine, excitement, enthusiasm, and warmth. It also represents fascination, happiness, creativity, determination, attraction, success, encouragement, and stimulation. Orange is thought to increase oxygen supply to the human brain, stimulate mental activity, and also produces an invigorating effect. It is also found that orange stimulates appetite due to being associated with citrus fruit. Due to its high visual and attention-drawing abilities, orange is often used to catch attention and highlights the most important elements in advertisements.</td>
</tr>
<tr>
<td>Yellow</td>
<td>Yellow is a bright, warm, and cheeky colour that is associated with joy, happiness, intellect, and energy. Even though yellow is seen as a cheerful colour, people are more likely to lose their temper when in yellow rooms. This colour is therefore also known to create feelings of frustration and anger. Research has shown that yellow increases human metabolism. Yellow is also the most visible colour but due to the high amount of light that is reflected, it is found to be the most fatiguing colour to the eye. It is often used in advertisements because of its attention getting attributes.</td>
</tr>
</tbody>
</table>

(Adapted from: Hoyer & MacInnes, 2001: 92; Nolan, 2003; Van Wagner, 2006; Wells, et al., 1995: 474; Wright, 2006)

Other prominent colours observed in pharmaceutical advertisements include black, white, pink, and brown. Table 3.5 identifies the psychological interpretation and symbolism of these four colours.

3.3.1 Application of colour in pharmaceutical advertisements

3.3.1.1 Warm colours

The warm colour, orange, can be prominently seen in the advertisement, Orango® (see Figure 3.27). When investigating the reasons for using this colour, the psychological and symbolic meanings can be that orange is an energetic colour which is synonymous with
energy and immunity. Energy is provided and immunity is improved by means of multivitamins, minerals and anti-oxidants, all of which are found in this product. When looking at the visual representation of the white bubbles, it literally represents the dispersible, fizzy action of the tablet but a deeper, psychological and symbolic meaning can be that it represents air bubbles, which is supported by the fact that the colour orange is thought to increase oxygen supply to the human brain. Due to the high visibility of this colour, the air bubbles which host various vitamins, minerals, and anti-oxidants are highlighted in this advertisement. Orange also represents the citrus fruit, orange, which indicates the flavour of the product (Hoyer & MacInnes, 2001: 92; Nolan, 2003; Van Wagner, 2006; Wells, et al., 1995: 474; Wright, 2006).

Table 3.4 Psychological interpretation and symbolism of cool colours

<table>
<thead>
<tr>
<th>COLOUR</th>
<th>PSYCHOLOGICAL INTERPRETATION AND SYMBOLISM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blue</td>
<td>Blue is seen as a masculine colour and thus the colour of choice of men. It symbolises trust, loyalty, wisdom, confidence, intelligence, faith, truth, heaven, and is associated with depth and stability. It is furthermore described as being peaceful, tranquil, secure, orderly, and is also linked to consciousness and intellect. Blue is found to be beneficial to the mind and body, hence its slowing effect on human metabolism, lowering effect on pulse rate, and body temperature. Blue also induces a calming effect on the body. It is the least appetising colour and therefore was found to suppress appetite.</td>
</tr>
<tr>
<td>Purple</td>
<td>Purple symbolises power, nobility, royalty, luxury, ambition, and wealth. It also represents wisdom and spirituality. Purple does not often occur in nature and is considered to appear exotic or even artificial. In a study it was found that 75% of the participating pre-adolescent children preferred purple above other colours. Bright purple colours are therefore used to promote children’s products, whereas light purple is a good choice for feminine products.</td>
</tr>
<tr>
<td>Green</td>
<td>Green is the colour of nature and symbolises tranquillity, growth, harmony, freshness, health, and fertility. It is found that green has a strong emotional correspondence with safety and is therefore used when advertising medication and medical products. Green is thought to have healing powers. This colour is also the most restful colour on the human eye and can therefore improve vision.</td>
</tr>
</tbody>
</table>

(Adapted from: Hoyer & MacInnes, 2001: 92; Nolan, 2003; Van Wagner, 2006; Wells, et al., 1995: 474; Wright, 2006)
Table 3.5 Psychological and symbolic interpretation and symbolism of black, white, pink, and brown

<table>
<thead>
<tr>
<th>COLOUR</th>
<th>PSYCHOLOGICAL INTERPRETATION AND SYMBOLISM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Black</td>
<td>Black is a symbol of menace or evil but is also popular as indicator of power. It is also associated with elegance, formality, and mystery. This colour is often associated with death and mourning but in ancient Egypt it represented life and rebirth. Black is thought to have slimming qualities and is therefore often used in fashion. This colour, when used as background colour, can accentuate other colours.</td>
</tr>
<tr>
<td>White</td>
<td>White is a bright colour and creates a sense of space or advertising highlights. It is a colour that is associated with light, goodness, purity, virginity, and innocence. In advertising white is associated with coolness and cleanliness. White is also associated with hospitals, doctors, and sterility, and is therefore used to suggest safety when promoting medical products. It is often associated with low weight, low-fat food, and dairy products.</td>
</tr>
<tr>
<td>Pink</td>
<td>Pink is a light red that signifies love, romance, and friendship. It is thought to have a calming effect but researchers found that this only occurs with initial exposure to this colour. People who are already aggressive become even more agitated when becoming accustomed to this colour. Pink is associated with feminine qualities and also denotes passiveness.</td>
</tr>
<tr>
<td>Brown</td>
<td>Brown is a natural, down to earth colour that evokes a sense of strength and reliability. It is thought to bring warmth, comfort, and security but can also create feelings of sadness and isolation. Brown can often be seen as a sophisticated colour.</td>
</tr>
</tbody>
</table>

(Adapted from: Hoyer & MacInnes, 2001: 92; Nolan, 2003; Van Wagner, 2006; Wells, et al., 1995: 474; Wright, 2006)

3.3.1.2 Cool colours

The cool colour, green, can be seen in different saturations within the complementary and alternative medicine advertisement, Tranquility® (see Figure 3.28). Green is representative of nature as seen by the green leaves appearing in this advertisement. It also symbolises tranquillity and harmony, some of the qualities represented by this product and needed by the woman appearing in the advertisement. This colour also has a strong correspondence with safety, something that is needed by this woman as her state may cause her to harm herself. Due to the fact that green symbolises healing, the product advertisement depicts a scene where the woman can be healed when using Tranquility® (Hoyer & MacInnes, 2001: 92; Nolan, 2003; Van Wagner, 2006; Wells, et al., 1995: 474; Wright, 2006).
Figure 3.27 Orango® advertisement
(Source: The Oprah Magazine, 2005)

Figure 3.28 Tranquilyt® advertisement
(Source: You, 2006a)
3.3.1.3 Prominent colours

The colour, pink, can be seen in the advertisement for Citro-Soda® (see Figure 3.29). This advertisement targets females with urinary tract infections (UTIs) because this is a condition that affects up to 40% of females, as is stated in the literature of this advertisement. Femininity comes to the forefront in this advertisement and therefore the use of the colour pink. The word *serenity*, as is seen in the lexical aspects of the advertisement (“feminine serenity” and “serenity restored”), means calm, peaceful, and tranquil (Oxford Advanced Learner’s Dictionary, 1989: 1154; Concise Oxford English Dictionary, 2006: 1314). Pink is therefore used because of its calming effect and also because it denotes passiveness (Hoyer & MacInnes, 2001: 92; Nolan, 2003; Van Wagner, 2006; Wells, *et al.*, 1995: 474).

**Figure 3.29  Citro-Soda® advertisement**
(Source: You, 2006b: 34)
As can be seen in Figure 3.29, colour plays an important role in creating awareness but also assists in delivering a deeper psychological meaning. This, together with the symbolic interpretation a consumer makes when being exposed to such an advertisement, can play a definite role in creating awareness but also in building brand identity. It is therefore important to take the meaning of colour into consideration when decoding advertisements.

3.4 CONCLUSION

By having a greater understanding of the scientific techniques such as *semiotics* and *colour psychology* incorporated in pharmaceutical advertisements, researchers are assisted in the process of decoding advertisements. This will, in turn, help researchers in their effort to determine the advantages and disadvantages of pharmaceutical advertising forms such as DTC advertising. By understanding how these techniques are employed in the process of advertising, researchers are able to identify the psychological impact (if any) of pharmaceutical advertisements on consumers. These techniques, together with each country’s pharmaco-legal system, will aid in giving researchers a more clear indication of the legitimacy of pharmaceutical advertisements.

From the discussion in Chapter three, it is evident that semiotics play an importing role in the encoding and decoding process of pharmaceutical advertisements. Hence, this will play an important role in the empirical part of the study.

The following chapter will focus on the forensic aspects pharmaceutical advertisements have to adhere to in SA. There will also be focused on the forensic aspects employed in pharmaceutical advertisements found in international countries such as Australia, New Zealand, and Canada.
CHAPTER 4
FORENSIC ASPECTS OF PHARMACEUTICAL ADVERTISING

4.1 INTRODUCTION

It is of vital importance to ensure that pharmaceutical advertisements are not false, misleading, deceptive, misinterpreted, and that the correct healthcare advice is dispensed. To provide this assurance, the WHO sets ethical criteria for the promotion of medicines that can be used as a guide by countries to set their own ethical and legal criteria (World Health Organisation Ethical Criteria for Medicinal Drug Promotion, 1988).

Each country, or state as in the USA, has various regulatory bodies setting laws and ethical guidelines governing pharmaceutical advertising. Aspects such as the advertising of scheduled and unscheduled medication, medical devices, and disease awareness campaigns or advertisements are mostly dealt with. Table 4.1 lists some of the regulatory bodies of various countries responsible for the regulation of pharmaceutical advertisements. Most of these regulations and ethical guidelines are aimed at pharmaceutical advertisements, the so-called DTC advertisements and those directed at various healthcare professionals.

Countries also have self-regulatory authorities, underpinned by statutory authority, assisting in reviewing and setting guidelines to assure that pharmaceutical advertisements adhere to legal and ethical standards. For example, advertisements, including those for medicines, are regulated and reviewed by the ASA in SA as well as Ireland (Holmes & O'Shea, 2006; Legh & Cassim, 2006). Canada has more than one self-regulatory authority responsible for regulating pharmaceutical advertisements, namely the Pharmaceutical Advertising Advisory Board and the Research Based Pharmaceutical Companies (Hearn, Nagel & McCluggage, 2005; Hearn & Prendergast, 2006).
Table 4.1   Examples of regulatory authorities governing pharmaceutical advertising in selected countries

<table>
<thead>
<tr>
<th>COUNTRY</th>
<th>REGULATORY AUTHORITIES</th>
</tr>
</thead>
</table>
| GREECE                      | • Civil Code  
• Code of Greek Pharmaceutical Ethics (Pharmacists)  
• Code of Ethics for Physicians  
• Code of Ethics of the Hellenic Association of Pharmaceutical Companies (Medicinal products) |
| IRELAND                     | • Irish Governmental Authorities (Medical Preparations (Advertising) Regulations 1999  
• Medicinal Products (Control of Advertising Regulations 2005)  
• Irish Pharmaceutical Health Authority (IPHA)  
• Advertising Standards Authority of Ireland (ASAI)  
• Irish Medicines Board (IMB) |
| ISRAEL                      | • Ministry of Health  
• Israel Medical Association  
• Medicinal Companies Active in Israel |
| JAPAN                       | • Pharmaceutical Affairs Bureau of the Ministry of Welfare  
• Japan Pharmaceutical Manufacturers Association (Codes of Practices for the Promotion of Ethical Drugs)  
• Japan Fair Trade Commission |
| RUSSIA                      | • Russian Law on Medicines  
• Association of International Pharmaceutical Manufacturers (AIPM) |
| SPAIN                       | • Code of Ethics of the National Association of the OTC’s (ANFEP)  
• Advertising Act  
• Royal Decree 1416/1994 |
| UNITED STATES OF AMERICA (USA) | • Various regulatory bodies from each of the 52 states  
• Food and Drug Association (FDA)  
• Federal Trade Commission (FTC) |
| VENEZUELA                   | • Ministerio de Salud y Desarrollo Social (Ministry of Health)  
• Junta Revisora de Productos Farmaceuticos del Instituto Nacional de Higiene Rafael Rangel (National Authority Competent for Granting Sanitary Permission)  
• Junta Revisora de Productos Farmaceuticos (NJRPF) |

(Sources:  Abood & Brushwood, 1994; Antequera & De Bilbao, 2006; Georgopoulou, 2005; Holmes & O’Shea, 2006; Limura & Kubo, 2006; Melling & Zenin, 2006; Pastor & Navas, 2006)
4.2 WORLD HEALTH ORGANISATION GUIDELINES FOR PROMOTION OF MEDICINES

The WHO is a specialised agency of the United Nations (UN) which directs and coordinates the authority for international public health within the UN System. The UN was established when diplomats gathered in 1945 to discuss the setting up of a global health organisation. This brought the WHO into force on 7 April 1948. This Organisation is financed by contributions from member states and donors such as the pharmaceutical industry (About the World Health Organisation, 2006). One of the WHO’s objectives is to set norms and standards as well as promoting and monitoring their implementation. This also includes norms and standards that should be followed in pharmaceutical advertising (About the World Health Organisation, 2006).

In 1968 the WHO set ethical criteria for drug promotion which could be used as a guide by other countries. The WHO defines ethics criteria for the promotion of medicines as criteria that “lay the foundation for proper behaviour concerning the promotion of medicinal drugs, consistent with the search for truthfulness and righteousness” (World Consumer Rights Day (WCRD) 2007: Unethical Drug Promotion, 2007).

During this period emphasis was placed on the fact that pharmaceutical advertisements should provide information that is scientific, factual, balanced, and without any ambiguities. Here, importance was placed on the fact that these advertisements should provide correct information at all times (World Consumer Rights Day (WCRD) 2007: Unethical Drug Promotion, 2007).

These criteria were revised in accordance to a conference on The Rational Use of Drugs in Nairobi in November 1985. During this conference a draft, the Ethical Criteria for Medical Drug Promotion, was set and adopted by the World Health Assembly in 1988. The WHO urged their member states to apply these ethical criteria to develop their own national measure as well as to monitor and enforce these measures. However, the problem is that these ethical criteria is merely a guide for countries to follow and are not mandatory and therefore do not carry any legal obligation (About the World Health
One of the promotional activities to which these ethical criteria apply to is pharmaceutical advertising directed at the general public as well as at healthcare professionals (About the World Health Organisation, 2006). With regard to pharmaceutical advertising directed at the general public, the WHO developed the following guidelines which state that these advertisements should contain the following (World Health Organisation Ethical Criteria for Medical Drug Promotion, 1988):

- name(s) of the medicine’s active ingredient(s), either as the international non-propertry names (INN) or the approved generic name;
- the pharmaceutical product’s brand name;
- name and address of distributor or manufacturer;
- its major indication(s) for use;
- any warnings, major contraindications, and precautions the product may have should also appear on the advertisement; and
- where applicable, the selling price should be honestly portrayed on the advertisement.

Furthermore, ethical guidelines for the advertising prescription medicines directed at healthcare professionals were also provided by the WHO. In addition to the criteria that should appear in pharmaceutical advertisements directed at the general public, advertisements directed at healthcare professionals should also contain (World Health Organisation Ethical Criteria for Medical Drug Promotion, 1988):

- Name of ingredients that are known to be problematic should be included in the advertisement.
- Content of active ingredient(s) per dosage form or regimen.
- Dosage form or regimen of medicines should be mentioned.
- Approved therapeutic uses of the product should also be present.
- Reference to scientific literature should also be made.
The WHO also made reference to reminder advertisements directed at health care professionals. Criteria included that the medicine’s brand name, INN, or its approved generic name should appear on these advertisements. The name of each active ingredient as well as the name and address of the manufacturer or distributor, for the purpose of receiving further information, should also appear in pharmaceutical advertisements of this nature (World Health Organisation Ethical Criteria for Medical Drug Promotion, 1988).

It will therefore be important to determine whether member states do use these ethical criteria as guidance in developing and enforcing ethical and legal pharmaceutical advertising practices. This will ultimately indicate if these member states share the same beliefs that the WHO shares in ensuring that pharmaceutical advertisements provide information that is truthful, scientific, factual, balanced, and without any ambiguity.

4.3 FORENSIC ASPECTS OF PHARMACEUTICAL ADVERTISING IN SOUTH AFRICA

4.3.1 Laws and ethical codes governing pharmaceutical advertising practices

Pharmaceutical advertisements in SA are governed by various laws and ethical guidelines. The main authorities that govern pharmaceutical advertising are the: MCC, SAPC, ASA of SA, and the SA Government (Department of Health).

These advertisements are governed by the following regulations and guidelines (Code of Practice, 2004; Legh & Cassim, 2006):

- National Drug Policy;
- Pharmacy Act No. 53 of 1974, as amended;
- The Good Pharmacy Practice Manual;
- South African Pharmacy Council Ethical Rules;
- Advertising Standards Authority Code of Advertising Practices; and
• Medicines and Related Substances Act 101 of 1965, as amended, and the Regulations announced there under.

The Department of Health published the National Drug Policy (NDP) in 1996. The NDP has been compiled to “...develop fully the potential that drugs have to improve the health status within the available resources in a country” (Department of Health, 1996: i). It consists of 13 chapters each starting with an aim. Chapter seven, Rational use of drugs, is partly directed at pharmaceutical advertisements. The aim of this chapter is: “To promote the rational prescribing, dispensing and use of drugs by medical, paramedical and pharmaceutical personnel and to support the informed and appropriate use of drugs by the community.” The last portion of this aim specifically alludes to the promotion, and therefore the advertising, of medicines, “...to support the informed and appropriate use of drugs by the community” (Department of Health, 1996: 16).

Subsections falling under Chapter seven deal with education and training, drug information, and specifically, advertising and marketing of medicines. The subsection dealing with the marketing of medicines, Advertising and Marketing of Drugs, states that the marketing and advertising of medicines should adhere to the NDP as well as comply with national regulations and voluntary industry standards (Department of Health, 1996: 19; Gray & Day, 2000).

The NDP provided guidelines under this subsection to which promotional material regarding medicines should adhere to. Pharmaceutical advertisements therefore have to adhere to the following guidelines (Department of Health, 1996: 19; Gray & Day, 2000):

• Statements should not be of a misleading nature.
• Statements should be verifiable.
• Its real nature should be evident.
• All claims should be reliable, accurate, truthful, informative, balanced, up-to-date, and in good taste.
• Claims should be substantiated.
The other two subsections discuss the provision of correct pharmaceutical information directed at the general public as well as health care professionals to ensure the rational use of drugs. To ensure this among the general public, “...a more critical attitude to advertising and commercial information”, must be taken (Department of Health, 1996: 16; Gray & Day, 2000).

The Pharmacy Act No. 53 of 1974, as amended, published by the SAPC under the auspices of the Department of Health, deals with various legal and ethical pharmaceutical activities. Topics such as pharmaceutical education, disciplinary powers of the SAPC, and the conduct of pharmacists as well as with, although to a limited extent, the marketing of pharmaceutical products are dealt with by the SAPC (Pharmaceutical Society of South Africa Pharmacy Law Compendium, 2005). A guideline document, *The Good Pharmacy Practice Manual*, was also published by the SAPC and is relevant to the advertising of medicines by the manufacturing pharmacist (Pharmaceutical Society of South Africa Pharmacy Law Compendium, 2005).

The SAPC furthermore published a set of ethical rules, the *SAPC Ethical Rules*, which related to acts or omissions with respect to the various disciplinary steps that can be taken by them. There are 23 ethical rules dealing with topics such as dispensing practices, advertising, touting, the relationship with colleagues and other health service professionals, and various general unethical situations where disciplinary steps may be taken (South African Pharmacy Council, 1992). These ethical rules were published separately and are still in use but are currently being reviewed.

The ASA is a self-regulatory authority in SA which has the responsibility of ensuring that all forms of advertising, including pharmaceutical advertising, adhere to the ethical and legal standards set by the *Advertising Standards Authority Code of Advertising Practices* (“the ASA Code”). A self-regulatory authority is an authority in which the marketing communication industry regulates the content of advertisements on a voluntary basis (Pharmaceutical Society of South Africa Pharmacy Law Compendium, 2005).
The marketing communications industry consists of the following three participants (ASA, South Africa, 2004):

- sponsors of advertisements;
- advertising agencies responsible for the form and content of the advertisements; and
- publishing media.

These three participants work together to agree to set standards regarding advertising as well as the setting of a corrective system for advertisements failing to meet these standards (ASA, South Africa, 2004).

This self-regulatory system in advertising is supported by organisations from various parts of the industry, ranging from investment groups, cinema groups, cosmetics and toiletries, the Broadcasters Authority, pet food industry, to the pharmaceutical products industry. These organisations are members of the ASA and are thus required to adhere to the ASA Code (ASA, South Africa, 2004).

Members representing the pharmaceutical products industry are (ASA, South Africa, 2004):

- Health Products Association of SA;
- Hospital Association of SA; and
- Pharmaceutical Manufacturers’ Association of SA.

This system employed by the ASA operates on the basis of consumers lodging complaints with the ASA about a specific advertisement in question. These claims are then quickly and effectively resolved by the ASA Directorate. If necessary, such a complaint may be referred to the Advertising Standards Committee. In the event of the complainant being unsatisfied with the outcome of the investigation, the matter may be referred to the Appeal Committee of the ASA. Whenever the advertiser does not comply to the corrective measures to be made, the ASA will place an “Ad-alert” on such an
advertisement. No media, in accordance with the ASA Code, will publish an 
advertisement with an Ad-Alert (ASA, South Africa, 2004).

The following advertising and promotional material are some of the forms of print media 
subjected to the Code in accordance with the Medicines Act (Code of Practice, 2004):

- direct mail materials;
- booklets;
- aerial promotions such as hot air balloons;
- consumer letters;
- Internet;
- point of sales material;
- posters; and
- outdoor advertisements.

4.3.2 Pharmaco-legal aspects of advertisements

According to Section 1(1) of the Medicines Act regarding definitions, a pharmaceutical 
advertisement is defined as any medicine or scheduled substance which is advertised in 
the form of written, pictorial, or other descriptive matter or verbal statement or reference 
thereof and found in any of the following (Pharmaceutical Society of South Africa 
Pharmacy Law Compendium, 2005: MAE – 6):

- newspapers, magazines, pamphlets, or other publications;
- distribution to members of the public; or
- brought to the notice of the public in any manner whatsoever.

First and foremost, it must be realised that medicines may only be advertised after being 
registered by the MCC. As soon as the medicinal product has been registered a reference 
or registration number will be awarded which must be visible whenever advertised. This 
also accounts for complementary and alternative medicines as these may also only be
advertised or promoted as self-medication after being registered by the MCC (Legh & Cassim, 2006).

The regulations and ethical guidelines are based on Regulation 20 of the Medicines Act regarding the publication or distribution of false pharmaceutical advertisements (Pharmaceutical Society of South Africa Pharmacy Law Compendium, 2005: MAE – 20). Regulation 20(1) states that no person shall (Pharmaceutical Society of South Africa Pharmacy Law Compendium, 2005: MAE – 20):

“(a) publish or distribute or in any other manner whatsoever bring to the notice of the public or cause or permit to be published or distributed or to be so brought to the notice of the public any false or misleading advertisement concerning any medicine; or

(b) in any advertisement make any claim to the effect that the therapeutic efficacy and effect of any medicine is other than that stated by the council...suggest that any medicine should be used for a purpose or under circumstances or in a manner other than that stated...”

These two subsections of Regulation 20 deals with the fact that no person may publish or even distribute pharmaceutical advertisements to the general public that are of false or misleading nature. Furthermore, it states that any claim regarding the medicines’ efficacy, effectiveness, and indications, must first be approved by the Council before being published. Subsection (b) therefore supports Subsection (a) in that no false and misleading advertisements may be directed at the general public.

It is also of utmost importance to have an understanding of what is meant by false or misleading advertisements. The Federal Trade Commission (FTC) in the USA provided a universal meaning and states that false advertisements, in essence, are all those advertisements that are untrue. It was furthermore explained that false advertising also includes advertisements that make representations that the advertiser has no reasonable basis to believe, even if those representations turns out to be true (Basics in false advertising, 2003). Therefore, if there is no basis to believe the truth of a claim, even if testing later on found this to be true, such an advertisement will be seen as false (Basics in false advertising, 2003).
Misleading or deceptive advertisements are an illegal form of advertising that cause consumers to have the wrong idea or impression of what has been advertised (ASA, South Africa, 2004). To eliminate misleading advertisements, the ASA in collaboration with the Self-Medication Manufacturers’ Association of SA, developed the following guidelines for advertising OTC medicines (ASA, South Africa, 2004):

- Suggestion should be made that OTC products are medicines and not foodstuff, cosmetics, or any other type of non-medical product.
- No misleading statements dealing with the nature, ingredients, or indications of such products should be made.
- No direct or indirect suggestion shall be made that the product contains an unknown active ingredient.
- No advertisement should state that a product does not contain an active ingredient or ingredients used in the products of competitors other than permitted by the MCC.
- All claims relating to the speed of absorption, dissolution, distribution, or other pharmacokinetic particulars must be in support of evidence. Such evidence may not be extrapolated to claims that products offer improved efficacy, or speed of efficacy, without supporting evidence to substantiate such claims.
- No suggestions should be made claiming that a product’s safety or efficacy is due to the fact that it is natural, unless such claims can be substantiated by clinically proven results.
- No claim should state that a product is natural unless all its ingredients are naturally occurring, also including herbal products where all its active ingredients must be that of plants or extracts of plants.
- There should not be suggested that the product is side-effect free. Acceptable claims can be made that a specific side-effect is absent (for example, ‘no drowsiness’).

Pharmaceutical advertisements can be prevented from being false or misleading by ensuring that these advertisements are (ASA, South Africa, 2004):
• balanced, true, and not contain any exaggerated claims;
• developed in a manner that does not lead to unwarranted anxiety amongst consumers;
• free of statements that diagnose, provides advice, treatment, or a prescription given via correspondence;
• of a language that is understood and of a nature that are free from fear or distress;
• free of medical terminology that results in confusion amongst consumers;
• free of any material that could lead in consumers self-diagnosing conditions such as by detailed description or case history;
• free of any claims guaranteeing a product’s effects or statements suggesting that suffering may occur if consumers do not react to their product’s claims;
• can include the prevention of symptoms and the use of the product in chronic conditions but should be in line with the registered indication;
• not aimed, principally or exclusively, at children under the age of 16 years, except medication listed in Appendix 3. In this case children may not be shown using the product or that they are within reach of this medication without adult supervision. In cases were children can be used in these advertisements, it must be ensured that their credibility, loyalty, vulnerability, or lack of experience are not exploited, and should also not encourage excessive purchase;
• free of claims that the medication can improve normal health or that it can effect normal health if not used or that celebrities encourage the use of it;
• free of any misleading, improper, or alarming claims of recovery, or of any unsubstantiated claims made by healthcare professionals or scientists; and
• no incentive scheme for a self-medication product included.

Sections (1), (2), and (3) of Regulation 45 of the Medicines Act regarding the advertising of medicines, also discuss scheduled medicines advertised to the general public (Pharmaceutical Society of South Africa Pharmacy Law Compendium, 2005: MRE – 50). Regulation 45(2)(a) discusses the advertising of unscheduled as well as Schedule 0 and Schedule 1 medicines (Pharmaceutical Society of South Africa Pharmacy Law Compendium, 2005: MRE – 50):
“Medicines which do not contain a scheduled substance and medicines which contain a substance appearing in Schedule 0 or Schedule 1 may be advertised to the general public.”

Regulation 45(2)(b) identifies how Schedule 2 to Schedule 6 medicines may be advertised (Pharmaceutical Society of South Africa Pharmacy Law Compendium, 2005: MRE – 50):

“Medicines which contain a substance appearing in Schedule 2, Schedule 3, Schedule 4, Schedule 5, or Schedule 6 may be advertised only for the information of medical practitioners, dentists, veterinarians, pharmacists and other persons authorised to prescribe or in a publication which is normally or only made available to persons referred to therein.”

Regulation 45(2)(c), however, with regard to Subsection (b), states (Pharmaceutical Society of South Africa Pharmacy Law Compendium, 2005: MRE – 50):

“Paragraph (b) shall not be so construed as to prohibit informing the public of the prices, names, pack sizes and strengths of medicines which contain a substance appearing in Schedule 2, Schedule 3, Schedule 4, Schedule 5 or Schedule 6.”

Many examples of pharmaceutical advertisements contravening Regulation 45 of the Medicines Act regarding the advertising of medicines can still be found in South Africa. Table 4.2 illustrates an advertisement regarding contraceptive medicines directed at the general public. The majority of these contraceptives are either Schedule 3 or Schedule 4, thereby contravening Regulation 45(2)(b) but contrary to this Regulation, seems to be allowed by Subsection (c). Table 4.3, in turn, illustrates a pharmaceutical advertisement that adheres to Subsection (b). Subsection (b) and Subsection (c) are controversial and seems to contradict each other.

Figure 4.1 consists of a photograph depicting a billboard advertisement of Schedule 2 codeine-containing analgesics advertised by a community pharmacy. This also contravenes Regulation 45(2)(b), which states that Schedule 2 medicines may not be advertised to the general public. There can also be speculated that the large quantity of tablets (100 tablets) advertised, can contribute to analgesic abuse.
Table 4.2  Example of an advertisement that is in breach of Regulation 45(2)(b)

<table>
<thead>
<tr>
<th>Oral Contraceptives</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Biphasil® 28</td>
<td>31.95</td>
</tr>
<tr>
<td>Diane-35® 28</td>
<td>88.95</td>
</tr>
<tr>
<td>Femodine® 28</td>
<td>54.00</td>
</tr>
<tr>
<td>Femodine® Triopack</td>
<td>154.00</td>
</tr>
<tr>
<td>Ginette®-35 28</td>
<td>56.95</td>
</tr>
<tr>
<td>Logynon® ED 28</td>
<td>19.00</td>
</tr>
<tr>
<td>Melodene® 28</td>
<td>61.95</td>
</tr>
<tr>
<td>Microval® 28</td>
<td>29.95</td>
</tr>
<tr>
<td>Minerva® 28</td>
<td>69.00</td>
</tr>
<tr>
<td>Mirelle® 28</td>
<td>63.95</td>
</tr>
<tr>
<td>Nordette® 28</td>
<td>39.95</td>
</tr>
<tr>
<td>Nordiol® 28</td>
<td>39.95</td>
</tr>
<tr>
<td>Ovral® 28</td>
<td>37.95</td>
</tr>
<tr>
<td>Triphasil® 28</td>
<td>32.50</td>
</tr>
<tr>
<td>Triodene® 28</td>
<td>61.95</td>
</tr>
<tr>
<td>Yasmin® 28</td>
<td>69.95</td>
</tr>
</tbody>
</table>

LESS 35% ON THE REST

(Source: Masango, 2006: 13)

Table 4.3  Example of an advertisement which is permitted

<table>
<thead>
<tr>
<th>Name:</th>
<th>Ultracare</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strength:</td>
<td>5mg/5l</td>
</tr>
<tr>
<td>Size:</td>
<td>500ml</td>
</tr>
<tr>
<td>Price:</td>
<td>R90-00</td>
</tr>
</tbody>
</table>

(Source: Masango, 2006: 13)
4.3.3 General requirements for pharmaceutical advertisements

Regulation 45(4)(a) and (b) state that a written advertisement for a medicine must contain the following (Pharmaceutical Society of South Africa Pharmacy Law Compendium, 2005: MRE – 51):

- a proprietary name; and
- an approved name and quantity of each active ingredient in lettering that have minimum legibility. In case of a medicine containing one active ingredient, the lettering must not be less than one half the size of the largest lettering used in that of the proprietary name.

In addition to this, Regulation 45(4)(c) identified the following which should also be included (Pharmaceutical Society of South Africa Pharmacy Law Compendium, 2005: MRE – 51):
• Registration number if medicine is registered.
• Reference number allocated to a medicine in which an application for registration has been submitted in terms of Section 14 of the Medicines Act, followed by the words “(Act 101/1965)”.
• When a name, other that the proprietary name is also used, the lettering of the other name must be one half the size of that of the proprietary name.
• Veterinary medicine advertisements must state that it is for veterinary use only.
• Homeopathic medicine advertisements must state that it must be used according to homeopathic principles.

An example of an advertisement directed at the public contravening Regulation 45(2)(b) as well as Regulation 45(4)(c) can be seen in Figure 4.2. Figure 4.2 illustrates that the Schedule 2 products, Adco-dol® (codeine-containing analgesics), Allergex® (first-generation antihistamine containing chlorpheniramine maleate), Buscopan® (antispasmodic containing Hyoscine Butylbromide), and Vermox® (antiparasitic containing Mebendazole) are being advertised to the public (South African Medicines Formulary, 2003). As these products are all registered with the MCC, none of these products state the required registration number. The advertisement also does not mention the active ingredients of each product.

![Figure 4.2 Example of an illegal advertisement](source: Advertising pamphlet distributed by a pharmacy in the Nelson Mandela Metropole, 2007)
4.3.4 Pharmaceutical advertisements directed at healthcare professionals

In addition to Regulation 45 (4), Subsections (a), (b), and (c), the Marketing Code also provides the following information which should appear on the advertisement if directed to healthcare professionals (Code of Practice, 2004):

- at least one indication of the medicine, a statement of the dosage, method of use, and route of administration, which all should be consistent with the package insert;
- any warning made by the regulatory authorities should be included;
- concise profile of the medicine’s adverse effects, precautions, and contraindications, which all should be consistent with the package insert;
- scheduling status and pharmacological classification;
- registration number as well as the name and address of part of the business responsible for sale or supply; and
- a single exit price.

An abbreviated advertisement (an advertisement not longer than an A4 page and which only appears in professional publications) requires the following additional information, other than the information requested for an advertisement directed at healthcare professionals (Code of Practice, 2004):

- name, address, and telephone number of the registered license holder or part of business responsible for sale or supply; and
- a statement that further information is available on request from holder of the registration or in terms of the package insert.

4.3.5 Claims in pharmaceutical advertisements

Various rulings were also made by the MCC with regard to certain claims made which in turn then requires the specific product to be registered with this Council. This will also result in that that specific product needs to adhere to the regulations as determined by the
Medicines Act when being advertised. Table 4.4 identifies the rulings that were published by the MCC.

**Table 4.4   Rulings regarding specific claims made in pharmaceutical advertisements**

<table>
<thead>
<tr>
<th>CLAIMS</th>
<th>RULINGS MADE BY THE MCC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bacteria</td>
<td>If the claim, ‘removing the bacteria that cause’, appears on the packaging of a soap the product must be registered.</td>
</tr>
<tr>
<td>Pimple treatment and treatment of blemishes</td>
<td>Claims with respect to antibacterial skin cleansers used as pimple treatment and treatment of blemishes should be regarded as medicinal claims, thereby requiring such products to be registered.</td>
</tr>
<tr>
<td>Stress</td>
<td>A product cannot claim to relieve stress unless registered as a medicine. In the event of such claims made, approval must be obtained from the MCC.</td>
</tr>
<tr>
<td>Clinical trials</td>
<td>Results obtained from clinical trials can be used in advertisements but should not make additional claims other than those registered with the Council.</td>
</tr>
</tbody>
</table>

(Source: ASA, South Africa, 1994: G-5)

The following words and/or claims are permitted in advertisements (ASA, South Africa, 1994: G-6):

- **“Fast” and “effective”**

Such words may not be used in their comparative or superlative form if not approved by the MCC.

- **“Mild pain” to “moderate pain”**

Such phrases may be used in analgesic medicine advertisements but should only refer to body aches and pains such as toothache, period pains, headache, and those associated with colds, fever, and coughs.
“Fatigue”, “tone”, “run-down”, “energy”, “vitality”, “lack of concentration”, “tonic”, and “ability to work”

Such words or phrases may be used in advertisements of tonics.

The Code also deals with superlatives which are adverbs or adjectives expressing the highest quality degree (Concise Oxford English Dictionary, 2006: 1446). Superlatives are therefore grammatical expressions denoting the highest quality or degree, for example, best, worst, wildest, slowest, or most difficult (Code of Practice, 2004). The code illustrated the use of superlatives in advertisements by providing the following examples, one which is prohibited from being used and another which is permitted (Code of Practice, 2004):

- “The product was ‘the best’ treatment for the condition”. This statement could not be substantiated as there are too many variables to enable such a claim to be proven and its use should therefore be prohibited.

- “For this condition this medication is the ‘most widely’ prescribed in SA”. This is seen as a simple statement which can be substantiated, if not present in a misleading way.

### 4.3.6 Slimming product advertisements

Advertising of slimming products is also an issue of concern in SA as there is very little control enforced on such advertisements. The reason for concern is raised as some of these products may cause unnecessary or even dangerous adverse effects, especially in conditions such as hypertension, diabetes, and cardiovascular conditions. According to the Foodstuffs, Cosmetics, and Disinfectant Act, No. 54 of 1972, it is the duty of the Department of Health to exercise control over the advertising of slimming products (ASA, South Africa, 1994: G11).
Two important points raised by the Department of Health are that each slimming advertisement’s effectiveness should be linked to an approved kilojoule restricted diet and that temporary weight loss caused by fluid loss (sweating) may not be presented as a method to slim (ASA, South Africa, 1994: G11). Table 4.5 identifies additional regulations determined by the Department of Health.

Table 4.5  Additional regulations regarding slimming products

<table>
<thead>
<tr>
<th>TOPIC</th>
<th>REGULATIONS FOR SLIMMING PRODUCTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Muscle toning or “centimetre loss”</td>
<td>• Exaggerated claims such as “3.6 cm lost in one day” may not be made.</td>
</tr>
<tr>
<td></td>
<td>• Advertisements of muscle toning products may not claim to cause mass loss as that can only be achieved by means of exercising.</td>
</tr>
<tr>
<td>Testimonials and photographs</td>
<td>• Testimonials and photographs used must be genuine, original, and still apply.</td>
</tr>
<tr>
<td></td>
<td>• Testimonial statements or claims made must form part of the copy layout and must be substantiated.</td>
</tr>
<tr>
<td></td>
<td>• “Before” and “after” photographs must be dated and signed.</td>
</tr>
<tr>
<td>Claims in fibre and slimming advertisements</td>
<td>• The claim, “fewer kilojoules are absorbed by the body” is prohibited from being used.</td>
</tr>
<tr>
<td></td>
<td>• No reference should be made that fibre has the ability to curb or blunt appetite.</td>
</tr>
<tr>
<td></td>
<td>• The claim, “dietary fibre also slows down the absorption of glucose in your blood” should not be used as it is seen as misleading.</td>
</tr>
<tr>
<td>Slimming teas</td>
<td>Advertisements for slimming teas claiming to have slimming properties are considered to be false and misleading but may be advertised if the word, “slimming” or such claims are not present.</td>
</tr>
</tbody>
</table>

(Source: Advertising Standards authority of South Africa, 1994: G11)

According to the Medicines Act, the Department of Health found the following claims in advertisements for slimming products unacceptable (ASA, South Africa, 1994: G11):

- Claims which states that a slimming product is a medicine

To identify unacceptable claims stating that slimming products are medicines, the term “medicine” must first be defined. In accordance with the Medicines Act (Regulation 1(1)
regarding definitions), the term “medicine” is defined as (Pharmaceutical Society of South Africa Pharmacy Law Compendium, 2005: MAE – 8):

| “...any substance or mixture of substances used or purposing to be suitable for use or manufactured or sold for use in –
(a) the diagnosis, treatment, mitigation, modification or prevention of disease, abnormal physical or mental state or symptoms thereof in man; or
(b) restoring, correcting or modifying any somatic or psychic or organic function in man, and includes any veterinary medicines.” |

The ASA, however, defines “medicine” in a more simplistic way as substances that interfere with the normal physiology of the body. By keeping these definitions in mind, the following claims may not be made in slimming advertisements (ASA, South Africa, 1994: G11):

- the product melts away fat;
- bio-active ingredients are present;
- the product increases or speeds up metabolism; and
- the product makes fat cells shrink.

- Claims suggesting that other, similar products do not comply with the Act

Examples of such claims include “contains no harmful substances with side effects” and “product X is safe”.

Figure 4.3 illustrates a slimming advertisement that claims the product to be safe as well as a medicine, “Unique and safe medication”. The advertisement also claims to “Improve Health” without providing proof to the consumer and could therefore be seen as being false and misleading, even if found to have such properties when undergoing clinical trials.
4.3.7 Pharmaceutical advertising on the Internet

Pharmaceutical advertisements can be found on Internet websites in SA. Often these advertisements appear as spam on consumers’ computers or it may be received as an e-mail (see Figure 4.4).

Figure 4.3 Example of a slimming advertisement containing unacceptable claims
(Source: UD News, 2007: 3)

Figure 4.4 Pharmaceutical advertisement of a Schedule 4 medicine in the form of an e-mail
(Source: Gray & Day, 2000)
Figure 4.5 depicts a pharmaceutical advertisement of a Schedule 2 medicine for the treatment of migraine found on an “apparently independent” website. It was aimed at the general public and directed patients to specific trade name medicines. However, it was found to be funded by pharmaceutical industry advertising and made no attempt to provide evidence-based or balanced information (Gray & Day, 2000).

![Migril Advertisement](attachment://migril.jpg)

The advertising of medicines on the Internet is allowed but such advertisements should adhere to the following standards (Legh & Cassim, 2006; Government Gazette, No. 26572, 2004):

- Any form of promotional material regarding prescription-only medicines or those medicines which may not be legally advertised to the general public. It may only be advertised if a password protection scheme is incorporated ensuring that access is only obtained by healthcare professionals or the appropriate administration staff only. This scheme may also include a “quality seal” or accreditation by a national or international organisation.
- Medicine advertisements from international pharmaceutical companies put on the Internet from within this international country will also be regarded as coming within the scope of the Code.

- Prescription-only medicine advertisements appearing in electronic journals must, according to the MCC guidelines, state on each page of the advertisement that it is intended for healthcare professionals only.

4.4 FORENSIC ASPECTS OF PHARMACEUTICAL ADVERTISING IN INTERNATIONAL COUNTRIES

To investigate international law regarding pharmaceutical advertising, three countries were selected on the basis of the new pricing laws currently being debated in SA. The Pricing Committee in SA determined two methodologies to determine the pricing structure to be implemented on medicine (Osman, 2006b: 6). One of these methodologies is to compare the prices of medicines in SA against equivalent products in a group of countries with a similar set of medicine regulatory environment. From this group of countries, Australia, New Zealand, and Canada were selected. By investigating the pharmaceutical advertising laws in these countries, similarities and differences between SA and these countries, with regard to these laws, can be identified.

4.4.1 Australia and New Zealand

4.4.1.1 Laws and codes governing pharmaceutical advertising practices

On 10 December 2003 Australia and New Zealand formed a joint scheme for the regulations of therapeutic goods (Loveday & Williams, 2006). The agency responsible for the implementation of this joint scheme is called “The Australia New Zealand Therapeutic Products Authority” (“the ANZTPA”) (Loveday & Williams, 2006). This replaced Australia’s Therapeutic Goods Administration (“the TGA”) and New Zealand’s Medicines and Medical Devices Safety Authority (“Medsafe”) (Loveday & Williams, 2006; Cameron & Stoddart, 2006). The ANZTPA implemented the Australia New
Zealand Therapeutic Goods Code ("the Code") on 1 July 2006 (Loveday & Williams, 2006).

It is the responsibility of the ANZTPA to safeguard the health and safety of the public in Australia and New Zealand (Loveday & Williams, 2006; Cameron & Stoddart, 2006). This will be achieved through the regulation of the following therapeutic goods (Loveday & Williams, 2006):

- prescription-only medicines;
- OTC medicines;
- complementary medicines;
- medical devices; and
- blood products.

Before the ANZTPA came into effect medicinal product advertisements in Australia was governed by the TG Act including its legislation, the Therapeutic Regulations 1990 ("the TG Regulations") (Loveday & Williams, 2006). The TGA was responsible for the administration of the TG Act. The Trade Practices Act 1974 ("the TP Act"), which was administered by the Australian Competition and Consumer Commission ("the ACCC"), also played a role in the regulation of advertising concerning therapeutic goods. As the TP Act applies to all forms of advertising, this Act will continue to play a role in the advertising of therapeutic Goods in Australia (Loveday & Williams, 2006).

A number of Codes of Practices also applied, and will in all probability still apply, to the advertising of therapeutic goods in Australia and include the following (Loveday & Williams, 2006):

- The Therapeutic Goods Advertising Code ("the TGAC") which applied to all advertisements of therapeutic goods other than those directed at healthcare professionals or wholesalers thereof.
- The Medicines Australia Code of Conduct and supporting Guidelines which dealt with the promotion of prescription-only medicines.
• The Australian Self-Medication Industry (“the ASMI”) Code of Practice where the responsibility fell on the advertising of consumer health products.
• The Complementary Healthcare Council of Australia (“CHC”) Code of Practice for the Marketing of Complementary Healthcare and Health Food Products.

New Zealand in turn relied on the Medicines Act 1981 and the Medicines Regulations 1984 to regulate the advertising of medicines. The Medicines Act dealt with the manufacturing, sales, and supply of medicines, medical devices, and related products (Cameron & Stoddart, 2006). Other legislation and Industry Code of Practices also played a role in the regulation of such advertisements and may continue to do so (Cameron & Stoddart, 2006).

The following legislations played a role (Cameron & Stoddart, 2006):

• Fair Trading Act 1986;
• Consumer Guarantees Act 1993;
• Gambling Act 2003 (deals with sales promotion schemes); and
• Medicines (Database of Medical Devices) Regulations 2003.

The following Industry Code of Practices also played a role in the regulation of medicinal advertisements in New Zealand (Cameron & Stoddart, 2006):

• Research Medicines Industry Code of Practices (prescription-only medicines) (“RMI Code”);
• Advertising Standards Authority Codes of Practice (“ASA”);
• Therapeutic Advertising Pre-vetting System (“TAPS”);
• Medsafe Advertising Guidelines; and
• Proposed trans-Tasmanian Joint Therapeutic Agency.

The newly implemented Code consists of a Part A and Part B. Part A contains the common obligations and processes to be followed by the advertisers of therapeutic products in Australia and New Zealand (ASA, New Zealand, 2005; Australian
Government, 2006). Part B identifies the requirements for the various types of advertising for such products. The various types of advertising included in Part B are (ASA, New Zealand, 2005; Australian Government, 2006):

- Advertising of medicines to consumers.
- Advertising of therapeutic products to healthcare practitioners.
- Advertising of medical devices to consumers.

In these two countries the phrase “therapeutic goods” are frequently used in pharmaceutical advertising. The Code defines this phrase as (Australian Government, 2006):

- a product to be taken for therapeutic use;
- an ingredient or component in the manufacturing of a product for therapeutic use;
- a container, or part thereof, for a product, ingredient, or component for therapeutic use or for the manufacture of such a product; and
- a product falling within a product class principally being used for its therapeutic activity.

The Australia and New Zealand Therapeutic Products legislation set three key Advertising Principles which provided the foundation for the Code (Australian Government, 2006). These three principles are aimed at therapeutic product advertisements directed at both the general public and at healthcare professionals, as well as at medical device advertisements directed at the general public. Figure 4.6 identifies the three key advertising principles to which therapeutic product advertisements have to adhere to.

Advertising is defined, according to the Code, in the same way as the TG Act in Australia and the Medicines Act in New Zealand. Advertising is defined as any statement, design, or picture directly or indirectly intended to promote the supply or use of the goods (ASA, New Zealand, 2005; Cameron & Stoddart, 2006; Loveday & Williams, 2006). The TG Act furthermore described advertising as something which is published or broadcasted
and intended to promote the use or supply of the goods (Loveday & Williams, 2006). The Medicines Act also explained that medical advertisements are advertisements that are likely to cause any person to believe that it relates to any medical device, medicine, or treatment (Cameron & Stoddart, 2006).

**PRINCIPLE ONE**
Pharmaceutical advertisements have to comply with the Therapeutic Products Act(s) and Rules and also the Code

**PRINCIPLE TWO**
Pharmaceutical Advertisements must be represented in a truthful and balanced way, and should also not be misleading

**PRINCIPLE THREE**
Pharmaceutical advertisements should adhere to a high standard of social responsibility

Figure 4.6  Key advertising principles therapeutic products should adhere to
(Source:  Australian Government, 2006)

4.4.1.2  Advertisements directed at the general public and healthcare professionals

The main difference found in the Code between the two countries is when advertising to consumers. In Australia prescription-only medicines, and certain non-prescription medicines, are prohibited from being advertised to the general public. In New Zealand such advertisements are allowed, excluding the controlled medicines specifically prohibited by the Misuse of Drugs Act 1975 (ASA, New Zealand, 2005; Cameron & Stoddart, 2006; Loveday & Williams, 2006). This is in stark contrast to most of the other countries, including SA, where advertisements of prescription-only medicines directed at the general public, are strictly prohibited. Another country where such advertisements are allowed is the USA (Mintzes, 2006).

All DTC advertisements for prescription-only medicines appearing in all media in New Zealand must be pre-vetted and approved by TAPS (Cameron & Stoddart, 2006). The following should be clearly stated in such print advertisements (Cameron & Stoddart, 2006):
• “Prescription-only medicine”;
• “Use strictly as directed”;
• “If any symptoms continue or if you have side-effects, see your doctor, pharmacist, or healthcare professional”; and
• “Consult your doctor if (product name) is right for you”.

The guidelines to which therapeutic goods advertisements should adhere to are in many aspects similar as in SA guidelines. Therapeutic goods advertisements directed at both the general public and healthcare professionals should comply with the following requirements (ASA, New Zealand, 2005):

- All mandatory information used to encourage responsible use must be included.
- Sponsorship from any hospital, governmental agency, or other facility provided may be referenced in the advertisement. Such sponsorship must, however, not be presented as a product endorsement but rather only be explicitly acknowledged.
- Should not mislead or deceive, abuse trust, exploit superstitions, or cause unnecessary fear.
- Testimonials used (if not prohibited by law) must, in accordance with the Code, be current, typical, authentic, genuine, and also acknowledge any valuable consideration.
- May not encourage excessive or inappropriate use of therapeutic products.
- No reference may be made to serious conditions, ailments, diseases, or defects, without Agency approval.
- Products may not be glamourised nor appear to prey on the vulnerability of particular audiences. Vulnerable audiences may, for example, include people who are not fluent in the English language; minors (under the age of 18 years); people with impaired vision or hearing; people with chronic illnesses, serious illnesses, long-term disability, or mental health problems.
- No implication, statement, or claim may be made that products are safe, or cannot cause harm, or are side-effect free.
- Content should be balanced and truthful and claims made should be valid and substantiated in order for consumers to make an informed decision.
Scientific information may be included if presented in an accurate and balanced manner and not misleading.

Such advertisements should not arouse any unwarranted or unrealistic expectations of the product’s effectiveness.

Advertisements may not offer to provide a free sample of the product. This accounts exclusively to therapeutic devices and sunscreen preparations.

May under no circumstances advertise personal incentives to a pharmacist’s assistant or other non-healthcare professional sales person in retail in order to recommend or supply therapeutic products.

Consumers may not be led to believe that they can self-diagnose or inappropriately treat potential serious diseases.

Advertisements may not be directed towards minors, except advertisements of some of the following products: tampons, condoms and personal lubricants, lip balm, acne preparations.

The Code also states what information must be included in the advertisement of therapeutic goods. This is similar to that of the advertising of medicinal products in SA but some additional information must be clearly stated on advertisements found in Australia and New Zealand. The information to be found in the advertisements pertaining to therapeutic goods is (ASA, New Zealand, 2005):

- trade name;
- reference to the approved or permitted indication(s) for the use of the goods; and
- where applicable, a list of ingredients or the following statements should stand out:

  ALWAYS READ THE LABEL

except in the case of direct marketing and Internet marketing;
• The words

USE ONLY AS DIRECTED

must be prominently displayed; for all claims relating to symptoms of diseases or conditions the following words must be stated:

IF SYMPTOMS PERSIST SEE YOUR DOCTOR/HEALTHCARE PROFESSIONAL

or in the case of a Schedule 3 (Pharmacist-only medicines) therapeutic good listed in Appendix H of the Standard for the Uniform Scheduling of Drugs and Poisons (Australia), the words:

YOUR PHARMACIST'S ADVISE IS REQUIRED

• Therapeutic goods that can be lawfully advertised and that are available only directly from, or on recommendation of a healthcare professional (except Schedule 2 (Pharmacy medicines) and Schedule 3 medicines) the following statement must be visible:

YOUR [appropriate healthcare professional] WILL ADVISE YOU WHETHER THIS PREPARATION [product name] IS SUITABLE FOR YOU/YOUR CONDITION

• The advertisement’s approval number must be present and prominently displayed in the bottom right hand corner of the advertisement.

As a result of the difference between Australia and New Zealand regarding the advertising of prescription-only medicines, the following also apply to such advertisements (ASA, New Zealand, 2005; Loveday & Williams, 2006):
i. Restricted or pharmacist only medicines (New Zealand) or Schedule 3 medicines (Pharmacist-only Medicines) listed in Appendix H (Australia), must contain the statement:

YOUR PHARMACIST’S ADVICE IS REQUIRED; or AVAILABLE ONLY FROM YOUR PHARMACIST

ii. Schedule 4 medicine (Prescription-only medicines) advertisements in New Zealand must contain the statement:

PRESCRIPTION MEDICINE, CONSULT YOUR DOCTOR [or other prescriber] TO SEE IF THIS MEDICINE IS RIGHT FOR YOU

4.4.1.3 Analgesic, vitamin, and weight management advertisements

The code also gives attention to the advertising of certain specific categories such as analgesics, weight management products, and vitamins. In Australia and New Zealand analgesics are classified, according to the Code, as those preparations used for the relief of minor aches and pains which contains one or more of the following substances (ASA, New Zealand, 2005; Australian Government, 2006):

- codeine;
- paracetamol;
- other non-steroidal anti-inflammatory drugs; or
- salicylic acid, its salts and derivatives (including aspirin), and their salts.

The Code, however, excludes preparations for use in self-limiting conditions and which contain an analgesic in combination with one or more other active ingredients such as cough mixtures and cold tablets (ASA, New Zealand, 2005; Australian Government, 2006).
Print media advertisements for analgesics must contain the warning statement (Australian Government, 2006):

USE ONLY AS DIRECTED. INCORRECT USE COULD BE HARMFUL. CONSULT YOUR HEALTHCARE PROFESSIONAL IF SYMPTOMS PERSIST

Furthermore, it is stated that these advertisements must not imply that the consumption of analgesics are safe. Such advertisements must also not claim that these agents will relax, sedate, stimulate, and relief tension (ASA, New Zealand, 2005).

With respect to the advertising of vitamins, such advertisements may not claim the following (ASA, New Zealand, 2005; Australian Government, 2006;):

- vitamin supplements are substitutes for good nutrition or a healthy diet;
- vitamins are superior or more beneficial than dietary nutrients; and
- normal health may be affected if not taking vitamin supplements.

Weight management advertisements are also of concern and therefore mentioned in the Code. These guidelines provided are similar to that which is provided in SA. Claims made for weight management (weight loss), clothing size loss, measurement reduction, and weight control or maintenance must have an appropriate balance between claims and references to health energy-controlled diet and physical activity (ASA, New Zealand, 2005; Australian Government, 2006).

4.4.1.4 Pharmaceutical advertisements on the Internet

No specific guidelines or laws are provided in the Code that deals with the subject of Internet advertising. As this Code is still in its infancy, more attention may be given to Internet advertising in the future. Before the Code came into effect in Australia, Internet advertisements where treated as “below the line” advertisements which did not require (in practice) approval first before being published, even though such a form of advertising fell within the parameters of the advertising definition set by the TG Act (Loveday &
Williams, 2006). Currently, however, Internet advertising of therapeutic goods appearing on Australian and New Zealand websites must comply with the Code (Cameron & Stoddart, 2006; Loveday & Williams, 2006).

## 4.4.2 Canada

In Canada pharmaceutical advertisements are regulated by Health Canada and the Food and Drugs Act and its regulations. Health Canada is a national regulatory authority for health product advertisements (Health Canada, 2006a). Health product advertisements are defined as any representation by means of, for example, audiovisual- and print media, and the Internet for the purpose of promoting directly or indirectly the sale or distribution of any health product (for example, vaccines, biological products, natural health products, medical devices, and drugs) (Health Canada, 2006b).

Health Canada carries out the following activities (Health Canada, 2006b):

- provides policies which effectively regulates marketed health products;
- develops guidance documents for the interpretation of the regulated framework; and
- oversees the regulatory advertising activities.

Only health products that have been authorised for sale in Canada by the Health Products and Food Branch (HPFB) of Health Canada may be advertised (Health Canada, 2006b). These products can be distinguished from unauthorised products based on an eight-digit number preceded by a specific acronym. Three different acronyms exist and are illustrated by Table 4.6.

The Food and Drugs Act (“the Act”) provides the basic criteria for acceptable advertising of medicines and medical devices. Regulations under the Act that plays a role in providing these criteria for medicines are the Food and Drug Regulation as well as the Natural Health Products Regulations. Section 1 of the Act defines advertising as (Health Canada, 2006b):
“Any representation by any means whatever for the purpose of promoting directly or indirectly the sale or disposal of any food, drugs, cosmetic, or device.”

This therefore refers to any message and has the primary purpose of influencing the audience that it is directed at.

Table 4.6 Acronyms used to distinguish authorised health products from unauthorised health products

<table>
<thead>
<tr>
<th>ACRONYM</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>NPN</td>
<td>Natural health products bear this acronym which stands for the Natural Product Number.</td>
</tr>
<tr>
<td>DIN</td>
<td>Authorised drugs bear this acronym which stands for Drug Identification Number.</td>
</tr>
<tr>
<td>DIN-HM</td>
<td>Homeopathic medicines bear this acronym which stands for Drug Identification Number – Homeopathic Medicines.</td>
</tr>
</tbody>
</table>

(Source: Health Canada, 2006b)

The general rule established by the Act is that no person shall advertise any drug or medical device in a manner that is false, misleading, deceptive, or is likely to create incorrect impressions regarding its character, value, composition, quantity, merit, or safety (Hearn & Prendergast, 2005). Pharmaceutical advertisements are also prohibited from being geared towards the treatment, prevention or cure of any disease, disorder, or abnormal physical state listed in Schedule A of the Act. Schedule A includes a list of about 40 conditions (for example, alcoholism, diabetes, epilepsy, heart disease, glaucoma, asthma, obesity, gout, sexual impotence, menstrual flow disorders) that are deemed as sufficiently serious as to warrant such an exclusion (Hearn & Prendergast, 2006; Health Canada, 2004). There is also a restriction on the advertising of medicines manufactured, sold, or represented for use in the prevention of contraception (Hearn, et al., 2005).
Pharmaceutical advertisements also have to apply to various regulations that apply to advertising in general. Such regulations include (Hearn, et al., 2005):

- Competitors Act;
- Trade-marks Act;
- Copy Right Act; and
- Common Law.

As in SA, Australia, and New Zealand, there are various self-regulatory authorities responsible for assisting in the regulating pharmaceutical advertisements. Table 4.7 identifies the self-regulatory authorities in Canada and also their main responsibilities.

**Table 4.7  Canadian self-regulatory authorities and their responsibilities**

<table>
<thead>
<tr>
<th>SELF-REGULATORY AUTHORITY</th>
<th>RESPONSIBILITIES</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Advertising Standards Canada (ASC)</strong></td>
<td>The ASC is responsible for providing effective self-regulation of pharmaceutical advertisements by means of applying the Canadian Code of Advertising Standards. This Authority is also responsible for objective and independent review of the copy layout of these advertisements by means of the ASC Clearance Services.</td>
</tr>
<tr>
<td><strong>Pharmaceutical Advertising Advisory Board (PAAB)</strong></td>
<td>PAAB is an independent review agency with the primary role of ensuring prescription medicine advertisements directed at healthcare professionals are accurate, balanced, and evidence-based. In accordance to PAAB, all advertisements directed at healthcare professionals must comply with the PAAB Code of Advertising Acceptance.</td>
</tr>
<tr>
<td><strong>Research Based Pharmaceutical Companies (Rx &amp; D)</strong></td>
<td>Rx &amp; D is an authority that represents the Canadian research-based pharmaceutical companies. Members must comply with the Rx &amp; D Code of Conduct as well as the PAAB Code of Advertising Acceptance. Furthermore, Rx &amp; D also provide requirements and procedures to healthcare professionals regarding relevant educational activities.</td>
</tr>
</tbody>
</table>

*(Source: Hearn, et al., 2005; Hearn & Prendergast, 2006)*

In addition to the Act’s definition of advertising, the Canadian Code of Advertising Standards (ASC Code) also provided a detailed definition of what they classify as
pharmaceutical advertising. The ASC Code defines advertising as (Hearn & Prendergast, 2005):

> “...any message in which the content is controlled directly or indirectly by the advertisers, expressed in any language and communicated in any medium to Canadians, except media other than that from Canada, as well as packaging, wrappings, and labels, with the intent to influence their choice, opinion, or behaviour.”

4.4.2.1 Advertisements directed at the general public and healthcare professionals

When referring to pharmaceutical advertisements directed at the general public, distinction is made between the advertising of non-prescription medicines and prescription-only medicines. Non-prescription medicines (Schedule II, Schedule III, and Unscheduled medicines) may be advertised to the general public, provided that such advertisements are subjected to the Act as well as to various other codes, guidelines, and laws (Hearn & Prendergast, 2005). Advertisements of prescription-only medicines (Schedule I medicines) are prohibited in Canada (Gardner, et al., 2003; Mintzes, 2006).

Only Schedule F medicines are allowed to be advertised to the general public. Similar to Regulation 45(2), Subsection (c) of the Medicines Act in SA, Section C.01.044 of the Canadian Food and Drug Regulations state that only the name, price, and quantity of the medicine may appear in such advertisements (Gardner, et al., 2003; Hearn, et al., 2005; Hearn & Prendergast, 2005). Schedule F medicines include medicines containing active ingredients such as barbiturates, thyroxin, sulphonamides, phenytoin sodium, as well as antibiotics, hormones, and anxiolytics (GST/HST Memoranda Series, 2000: 3). This was done to allow for competition between pharmacies (Gardner, et al., 2003). However, according to Gardner, Mintzes and Ostry (2003), a shift in the interpretation of this policy has occurred which resulted in DTC advertisements being published on a daily basis. Three types of DTC advertisements, occurring in Canada, are identified and defined in Figure 4.7.
Figure 4.7 Identification of the three direct-to-consumer advertisements found in Canada
(Source: Gardner, et al., 2003)

All three forms of DTC advertising contravene the Act and are therefore prohibited from being published. According to Gardner, Mintzes and Ostry (2003), however, reminder- and help-seeking advertisements are now seen on a daily basis in Canada without any legal intervention. An example of a product claim advertisement can be seen in Figure 4.8. This advertisement identifies the medicine for erectile dysfunction, Cialis®, and also discloses its well-known controversial therapeutic claim, the so called “36-hours Cialis®”.

Figure 4.9 depicts an example of a reminder advertisement for the medicine, Viagra®, used in erectile dysfunction. In this advertisement it is evident that only the name of the medicine, Viagra®, appears without stating its use(s). Figure 4.10 illustrates an example of a help-seeking advertisement which informs the general public about oesophageal reflux without specifying the treatment options. The assumption can, however, be made that the treatment information available for oesophageal reflux, may be obtained by dialling the toll free number provided.

These three forms of DTC advertising identified (see Figure 4.7) are prohibited by the Act in the following two ways (Gardner, et al., 2003; Mintzes, 2006):

- by prohibiting the advertising of prescription-only medicines, regardless of their indications; and
• by prohibiting the advertising of any medicine to the general public as treatment, preventive, or cure for Schedule A diseases.

Figure 4.8 Controversial product claim advertisement for the medicine Cialis® (Hearn, et al., 2005)

Advertising directed at healthcare professionals are required by the PAAB Code to contain the following information (Hearn & Prendergast, 2003):

• brand- or trade name of the medicine;
• generic name;
• federal drug schedule; and
• therapeutic and/or pharmacologic classification.
Information brochures or advertisements are intended to promote a better understanding of a disease and its treatment. In this case brochures and advertisements may include specific drug information yet retaining their non-promotional status under the following conditions set out in the TPD Guidelines (Hearn & Prendergast, 2005):

- Overall content must be disease-related rather than product-related.
- Treatment options (drug and non-drug options) and their risks and benefits must be discussed in an objective manner.
- No emphasis must be placed on a single drug product or its merits.
• No reference may be made to any unauthorised medicines other than to mention that research is under way, under which the regulatory status should be indicated.
• No reference may be made to the availability of any unauthorised medicines.

Figure 4.10  Help-seeking advertisement for oesophageal reflux
(Source: Hearn, et al., 2005)

4.4.2.2  Pharmaceutical advertising on the Internet

Internet advertisements are regulated in the same way as the traditional type of advertisements in Canada. In 2005 the PAAB Code was amended to reflect revised standards for appropriate advertising on the Internet which mentioned specific rules for
advertising practice such as pop-ups, links, and chat rooms. This led to the establishment of an advisory entitled the Internet Advertising – An Ethical Guidance (the PAAB Internet Advisory). Canada is one of the few countries to implement such guidelines (Hearn & Prendergast, 2003). The difficulty Canadian authorities are faced with is that they have no control over any media that originates outside the borders of Canada.

The PAAB Internet Advisory provided the following guidelines when information or advertisements directed at healthcare professionals appears on a website (Hearn & Prendergast, 2005):

- Access must be restricted to healthcare professionals only via the introduction of passwords.
- Such websites must not be advertised to the general public.
- Key words for search engines must not be provided so that non-professionals are attracted to website.
- Appropriate terminology and subject matter must be used to emphasise that the website is directed at healthcare professionals only.

Health Canada identified problematic areas with respect to “links” on websites. Linking to other websites is permitted provided that their links do not promote the sale of Schedule F medicines. The following example is permissible (Hearn & Prendergast, 2003):

```
For United States Company X website click here
```

but the following is not allowed:

```
For information on brand X click here
```
Up to this point in Chapter four the standards provided by the WHO regarding the legal and ethical aspects of pharmaceutical advertisements in print form were identified. Overviews were also provided of these legal and ethical aspects in SA, Australia, New Zealand, and Canada. Section 4.5 will investigate and compare the legal aspects discussed in the preceding overview.

4.5 INVESTIGATION INTO THE LEGAL ASPECTS OF PHARMACEUTICAL ADVERTISING

4.5.1 Introduction

The investigation into the legal aspects of pharmaceutical advertising will consist of three sections. In Section 4.5.2 the guidelines regarding these legal aspects provided by the WHO will be compared with that of SA to determine if SA legislation adheres to these guidelines regarding pharmaceutical advertising. Section 4.5.3 will involve the comparison of pharmaceutical advertising guidelines of SA, Australia, New Zealand, and Canada. Lastly, Section 4.5.4 will identify problematic areas in SA pharmaceutical advertising law.

4.5.2 Comparing guidelines of the World Health Organisation regarding Pharmaceutical advertising to South African Legislation

Focusing on pharmaceutical advertisements directed to the general public, the WHO provided guidelines regarding pharmaceutical advertising that can be employed as norms and standards by SA. From these guidelines one can deduce that the WHO guidelines mostly focus on three areas: identification of medicines advertised as well as that of the suppliers, pharmacological necessities, and selling prices. With these focus areas in mind, the six criteria identified in these guidelines were used to compare the regulations and ethical guidelines in SA regarding pharmaceutical advertisements.
4.5.2.1 Identification criteria of medicines advertised

Table 4.8 identifies three of the six criteria that should be present in pharmaceutical advertisements and whether these are applied to SA legislation. These criteria focus on the identification of the medicines and the manufacturers or distributors thereof.

Table 4.8 Compliance to criteria for the purpose of identifying medicines and the manufacturers or distributors thereof in advertisements

<table>
<thead>
<tr>
<th>IDENTIFICATION CRITERIA</th>
<th>DOES SOUTH AFRICA COMPLY?</th>
</tr>
</thead>
<tbody>
<tr>
<td>International Non-proprietary Name (INN) or approved generic name of active ingredient(s)</td>
<td>Yes</td>
</tr>
<tr>
<td>Brand name</td>
<td>Yes</td>
</tr>
<tr>
<td>Name and address of manufacturer or distributor</td>
<td>No</td>
</tr>
</tbody>
</table>

From the results identified in Table 4.8, it is evident that SA legislation does not fully comply with the WHO guidelines. No specific mention is made in Regulation 45(4), Subsections (a), (b), or (c) of the Medicines Act regarding the advertising of medicines that pharmaceutical advertisements directed at the general public are required to state the name and address of the distributor or manufacturer (Pharmaceutical Society of South Africa Pharmacy Law Compendium, 2005: MRE – 51). This requirement is stated in the guidelines of the Marketing Code in SA but only with respect to pharmaceutical advertisements directed at health care professionals. During the study, however, it was observed that most pharmaceutical advertisements directed at the general public did, in most cases, provide some form of address or contact details of the distributor or manufacturer at the bottom of the advertisement.

4.5.2.2 Pharmacological norms

Two criteria that are of pharmacological importance to consumers in making informed decisions are (1) major indications, and (2) warnings, major contraindications, and precautions. These are listed in the WHO guidelines and should be present in SA
pharmaceutical advertisements (World Health Organisation Ethical Criteria for Medical Drug Promotion, 1988). Table 4.9 identifies whether SA regulations adhere to these norms.

Both of these pharmacological norms set by the WHO are not listed in SA legislation as a requirement for pharmaceutical advertisements directed at the general public. These pharmacological norms are, however, a requirement for pharmaceutical advertisements directed at healthcare professionals, as stated by the Marketing Code.

### Table 4.9  Compliance to pharmacological norms

<table>
<thead>
<tr>
<th>PHARMACOLOGICAL NORMS</th>
<th>DOES SOUTH AFRICA COMPLY?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Major indications</td>
<td>No</td>
</tr>
<tr>
<td>Warnings, major contraindications, and precautions</td>
<td>No</td>
</tr>
</tbody>
</table>

Pharmacological factors are of vital importance and, if not the most important, for consumers to make an informed decision when wanting to buy medicines seen in advertisements. It can be argued that it is the healthcare professional’s responsibility to ensure that customers buying these products from community pharmacies are aware of these pharmacological necessities. However, not all medicines advertised to the general public are bought at community pharmacies but are also available at supermarkets and corner cafes. Even if a patient information leaflet is provided with the product, and therefore becomes the customers’ responsibility, it is not to say that all these important pharmacological necessities will be identified and considered by customers.

Many consumers will buy medicines based on what they have read in advertisements, and for this reason alone, it remains an ethical responsibility of the advertiser to identify these pharmacological necessities, and ultimately, ensure the safe use of medicines.
4.5.2.3 Selling price

In accordance with this criterion, a pharmaceutical advertisement should, where applicable, honestly portray the medicine’s selling price. This is not stated as requirement for pharmaceutical advertisements directed at the general public but is, however, stated as guideline in the Marketing Code (Code of Practice, 2004). Here, the Marketing Code states that pharmaceutical advertisements directed at healthcare professionals should state a “single exit price”.

It can be concluded that pharmaceutical advertisements directed at the general public in SA do not always comply with all the norms and standards set by the WHO. For example, important information such as pharmacological norms, is not a requirement in pharmaceutical advertisements directed to the general public in SA. It should be reemphasised that the criteria set by the WHO only serve as a guide for countries to set pharmaceutical advertising regulations and ethical guidelines and are not enforceable by law. Even if found that SA does adhere to many of these guidelines, it is not to say that this is what is evident in pharmaceutical advertising in print form. The results obtained in this study from the focus group, consumer survey, as well as the decoding process will identify to some extent the degree to which these regulations and guidelines are adhered to in practice in the pharmaceutical advertisements utilized in this study.

4.5.3 Comparing pharmaceutical advertising regulations of South Africa, Australia, New Zealand and Canada

The focus of the comparison in the section that follows is on how the legislation of each of these countries mentioned above define pharmaceutical advertisements, as well as the similarities and differences found in the pharmaceutical advertising in print form.
4.5.3.1 Definition of pharmaceutical advertisements

It is important to determine how each of these countries defines pharmaceutical advertising in order to compare and identify any similarities or differences in pharmaceutical advertising regulations in SA.

Figure 4.11 summarises the definition of pharmaceutical advertising provided by Australia and New Zealand, whereas Figure 4.12 summarises the definition provided by Canada. Each of these figures also identifies the legislation in which these definitions are published in.

<table>
<thead>
<tr>
<th>AUSTRALIA AND NEW ZEALAND</th>
<th>Therapeutic Goods Advertising Code</th>
<th>Any statement, design, or picture directly, or indirectly, intended to promote the supply or use of goods.</th>
</tr>
</thead>
</table>

**Figure 4.11  Definition of pharmaceutical advertising in the legislation of Australia and New Zealand**
(Source: Advertising Standards Authority, Inc., New Zealand, 2005; Cameron & Stoddart, 2006; Loveday & Williams, 2006)

<table>
<thead>
<tr>
<th>CANADA</th>
<th>Section 1 of the Federal Food and Drug Act</th>
<th>Any representation by any means for the purpose of promoting directly or indirectly the sale or disposal of any drug or device.</th>
</tr>
</thead>
</table>

**Figure 4.12  Definition of pharmaceutical advertising in the legislation of Canada**
(Source: Health Canada, 2006)

In essence, the difference between these two definitions is basically in the wording of these sentences. Both of these definitions are broad in defining what specific form of advertising may be used to advertise pharmaceutical products. The Therapeutic Goods Advertising Code in Australia refers to advertising as “*Any statement, design, or picture...intended to promote...*”. This is a vague interpretation and does not provide a
clear description of what an advertisement is, only that its intended use is to “promote the supply or use of goods”. This same vagueness of the definition of advertising can be seen in Canada’s Section one of the Federal Food and Drug Act which states, “Any representation by any means for the purpose of promotion...”. Again, the word, “any”, which appears in both definitions, does not clearly point out what an advertisement should entail.

In SA, the Medicines Act defines advertising in a more structured and detailed manner. Figure 4.13 provides a reminder of how the Medicines Act defines an advertisement.

\[
\text{“Any written, pictorial, visual, or other descriptive matter or verbal statement or reference -} \\
\text{(a) appearing in any newspaper, magazine, pamphlet, or other publication; (b) distributed to members of the public; or (c) brought to the notice of members of the public in any manner whatsoever, which is intended to promote the sale of that medicine”}
\]

Figure 4.13   Definition of advertising published in the Medicines Act of South Africa  
(Source: Pharmaceutical Society of South Africa Pharmacy Law Compendium, 2005: MAE – 6)

This definition is more descriptive than the definitions provided in Australia, New Zealand, and Canada. The Medicines Act determines where pharmaceutical advertisements may appear, “…newspaper, magazine, pamphlet, or other publication;…”, and at whom it may be directed, “…distributed to members of the public…brought to the notice of members of the public…”. In this regard, the Medicines Act of South Africa provides a more detailed and descriptive explanation of what pharmaceutical advertising is.

Subsection (c), however, may lead to confusion, “brought to the notice of members of the public in any manner whatsoever…”. The phrase, “in any manner”, may result in a generalisation of what manner pharmaceutical products may be advertised. A rather
more specific definition should be provided to ensure that medicines are advertised in an ethical manner.

In summary, the definition provided by the Medicines Act of SA can be regarded as more structured and explanatory than the definitions provided by the Therapeutic Goods Advertising Code and Section one of the Food and Drug Act.

4.5.3.2 Forensic aspects of pharmaceutical advertisements in print form

Various legal aspects, regarding pharmaceutical advertising in each of these three countries, were investigated and compared. Ethical considerations, claims, prescription-only medicine advertisements directed at the general public, as well as slimming product advertisements were focused on.

(a) Ethical considerations

What is evident in all four countries is that appropriate laws have been established to ensure that pharmaceutical advertisements are ethical and legal. The Food and Drug Act of Canada provides a general rule summarising that pharmaceutical products must not be advertised in a manner that is false, misleading, deceptive, or likely to create incorrect impressions. Through the application of various laws and ethical guidelines, each of these countries adheres to similar principles.

This general rule provided by Canadian law is echoed by the NDP of SA. The NDP states that claims or statements used in pharmaceutical advertisements should be reliable, accurate, truthful, informative, balanced, up-to-date, in good taste, not be misleading and always be substantiated (Department of Health, 1996: 19). Similarly, principle two and principle three (see Figure 4.6) of the Therapeutic Goods Advertising Code in Australia and New Zealand state that pharmaceutical advertisements should be truthful, balanced, not be misleading and should also be socially acceptable. Similar ethical considerations were made in the Food and Drug Act of Canada.
(b) Claims

Regulations in these countries focus on various claims allowed in pharmaceutical advertisements. In SA, Australia, and New Zealand specific classes of pharmaceutical products are focused on, namely analgesics (pain medication), vitamin supplements, and slimming products. The Therapeutic Goods Advertising Code of Australia and New Zealand refers to preparations used to relieve minor aches and pains consisting of more than one of the following substances: codeine, paracetamol, other non-steroidal anti-inflammatory medicines, or salicylic acid and derivatives such as aspirin. Print advertisements for these analgesic preparations, except those for self-limiting conditions, must contain the warning statement, “Use only as directed. Incorrect use could be harmful. Consult your healthcare professional if symptoms persist.”. No regulation or ethical guideline in SA or Canada stipulates that such a statement should appear in advertisements for analgesics.

However, the ASA of SA published Guideline two for medicines which briefly refers to words or claims that are permitted in analgesic advertisements. Claims such as “mild pain” and “moderate pain” are permitted in such advertisements but only to claims regarding body aches and pains such as toothache, period pain, headache, and those symptoms associated with the common cold and flu (ASA, South Africa, 1994: G-6).

Something exclusive to SA legislation, is that the ASA published guidelines to prevent OTC medicine advertisements from being misleading. These guidelines addresses exaggerated claims, claims that can lead to unwarranted anxiety among consumers, and the use of language that is understood and do contain medical jargon that can confuse consumers (ASA, South Africa, 2004).

(c) Prescription-only medicine advertisements directed at the general public

Of the four countries, New Zealand is the only country where the advertising of prescription-only medicines to the general public, the so-called DTC advertisements, is allowed. In Australia, prescription-only medicines and certain non-prescription
medicines are prohibited from being advertised to the general public. SA legislation (Regulation 45(2), Subsections (b) and (c)) states that Schedule 2 to Schedule 6 medicines may only be advertised to the general public for the purpose of providing information about the medicine’s name, its price, pack size, and strength (Pharmaceutical Society of South Africa Pharmacy Law Compendium, 2005: MRE – 50). Other information regarding these scheduled medicines may only be advertised to healthcare professionals. In Canada, similarly to this regulation, advertisements regarding Schedule F medicines may only be advertised to the general public for the purpose of providing similar information (Gardner, et al., 2003; Hearn, et al., 2005; Hearn & Prendergast, 2005).

(d) Slimming product advertisements

Guidelines are provided in SA, Australia, and New Zealand to regulate slimming products. More emphasis on this topic is placed in SA guidelines than in Australia and New Zealand. Guideline three published by the ASA in SA identifies what are not allowed in slimming advertisements, especially with regard to testimonials and photographs used, claims regarding fibre supplements, slimming products, muscle toning (“centimetre loss”), as well as slimming teas (ASA, 2004: G-11).

In Australia and New Zealand, the Therapeutic Goods Advertising Code stipulates similar requirements but in much less detail. This Code stipulates that claims in such advertisements, regarding weight management, clothing size loss, measurement reduction, and weight control or maintenance, should be in balance with references to health energy-controlled diets and physical activity (ASA, New Zealand, 2005; Australian Government, 2006).

By investigating the legislation of Australia, New Zealand, and Canada and comparing it with SA legislation, no major differences were found. These similarities show that each of these countries want to ensure that pharmaceutical advertisements are of the highest legal and ethical quality.
4.5.4 Problematic areas in South African pharmaceutical advertising law

Three major areas of concern in the regulation of pharmaceutical advertising were identified in SA. Firstly, there is a lack of authorities or regulatory bodies responsible for regulating pharmaceutical advertisements. Secondly, the Regulations regarding the advertising of Scheduled medicines to the general public are unclear and could result in confusion. Lastly, regulations regarding the advertising of medicines with a high abuse potential are limited.

4.5.4.1 Authorities responsible for the regulation of pharmaceutical advertisements

Although the responsibility of regulating pharmaceutical advertisements hinges on the concept of self-regulation, ultimately the responsibility of reviewing any irregularities remains the function of the ASA in SA. The problem is that this Authority is responsible for regulating all forms of advertising, not only pharmaceutical advertisements. The MCC, in collaboration with the Government (Department of Health), is, however, responsible for determining legal issues such as the requirements scheduled medicine advertisements have to adhere to. Even so, the responsibility of regulating and reviewing pharmaceutical advertisements, responding to consumer complaints, resolving these complaints, and also ensuring that advertisers take appropriate corrective steps, still remains the duty of ASA.

It is doubtful that a single Authority responsible for regulating all forms of advertising will be able to ensure that the majority of pharmaceutical advertisements are adhering to legal and ethical standards.

4.5.4.2 Regulations regarding the advertising of scheduled medicines

Regulation 45 of the Medicines Act regarding the advertising of medicines can lead to many misinterpretations. This section identifies which scheduled medicines may be advertised to the general public (Pharmaceutical Society of South Africa Pharmacy Law Compendium, 2005: MRE – 50).
Regulation 45(2), Subsection (b) discusses the advertising of Schedule 2 to Schedule 6 medicines. It therefore clearly states that Schedule 2 to Schedule 6 medicines may not be advertised to the general public. However, Subsection (c) states that the general public may be informed of Schedule 2 to Schedule 6 medicines but only with regard to providing information about their prices, names, pack sizes, and strengths. These two subsections seem to contradict each other, pending on how the word, “informing” in the latter subsection, as well as the word, “advertising”, is interpreted (see page 102 for the Medicines Act’s definition of ‘advertisement’).

By looking at Subsection (c) of the definition of advertising, “brought to the notice of members of the public in any manner whatsoever, which is intended to promote the sale of that medicine”, it seems that Subsection (c) of Regulation 45(2) does indeed provide the information listed to members of the public with an intention to promote the sale of these scheduled medicines. Therefore, Subsection (c) can be interpreted as a form of advertising, as is stated in the definition, “Any written, pictorial, visual, or other descriptive matter or verbal statement or reference...”. If so, Subsection (c) contradicts Subsection (b).

The SAPC is also of the belief that Schedule 2 to Schedule 6 medicines may not be advertised to the general public, even if limited to the information underlined in Subsection (c). This is evident from the article, “Pharmacies and Pharmaceutical Companies fined in excess of R10,000.00 for contravening advertising regulations”, published in the SAPC’s official publication, Pharmaciae (Masango, 2006: 12). An example of a table (see Table 4.2) consisting of a list of oral contraceptives (Schedule 3 and Schedule 4) was used to illustrate an advertisement that contravenes Regulation 45(2), Subsection (b). Table 4.2 only consists of the names of the oral contraceptives, pack sizes, and their prices, information allowed in accordance with Subsection (c) but is still regarded by the SAPC as contravening Subsection (b).

In Regulation 45(2), Subsection (c), no mention is made that such advertisements may state pharmacological information such as indications or side-effects. This can be used as argument in defence of Subsection (c), where the general public may be informed of a
Schedule 2 to Schedule 6 medicine’s name, its price, pack size, and strength, without any reference made to any pharmacological information.

Although Regulation 45(2), Subsections (b) and (c), appears to contradict each other, similarities to Subsection (c) is evident in Canada and seems to be normal practice. A regulation, similar to Subsection (c), can be found in Canadian Regulations regarding pharmaceutical advertising to the general public. It refers to the fact that only Schedule F medicines may be advertised to the general public in Canada, and similarly to Subsection (c), only the medicine’s name, price, and quantity thereof, may appear in these advertisements. There is also no reference made to any pharmacological information (Gardner, *et al.*, 2003; Hearn, *et al.*, 2005; Hearn & Prendergast, 2005).

The reason why Schedule F medicines are allowed to be advertised to the general public in Canada is to allow for competition between pharmacies. Gardner, Mintzes, and Ostry (2003), however, stated that many started to interpret this Regulation as a means to publish any DTC pharmaceutical advertisement. According to Canadian Regulations, the types of DTC advertisements seen on a daily basis are product claim advertisements, reminder advertisements, and help-seeking advertisements. All these forms of DTC advertisements are prohibited by the Canadian Food and Drug Act but, as a result of this Regulation, now appear in print media throughout Canada and are too difficult to regulate (Gardner, *et al.*, 2003).

By allowing Schedule 2 to Schedule 6 medicines to be advertised to the general public in SA, even with the limitations stated in Regulation 45(2), Subsection (c), more scheduled medicine advertisements will be published without adhering to these limitations. In the end it will be too difficult for the ASA to monitor, review and act upon such advertisements.

From an ethical point of view, pharmaceutical advertisements of medicines falling within this schedule range, do not really have a positive effect on primary healthcare, other than its positive effect in the selling of these products. In the USA and New Zealand where DTC advertising of most pharmaceutical products are allowed, researchers found many
disadvantages of such practices. The most important disadvantage found was that prescription medicines are portrayed as normal day-to-day consumer goods and not as therapeutic goods and therefore can have harmful side-effects if not properly used.

It is therefore important to keep these ethical considerations in mind upon reviewing Regulation 45(2), Subsection (c), in future, especially when potentially harmful medicines are advertised. The primary aim of such Regulations should be to ensure safety in SA’s primary health system.

4.5.4.3 Advertising of medicines with a high abuse potential

In 2007, a handout was sent with the Pharmaciae (Masango, 2007), where pharmacists were alerted about the increase of the abuse of codeine-containing analgesics in SA. The advertising of medicines with a high abuse potential directly to the general public, is regarded as an unethical practice, as such advertisements do not send a clear message that these agents can cause addiction if used incorrectly. This is especially true for the advertising of large quantities of codeine-containing analgesics, as depicted by the billboard advertisement (see Figure 4.1).

In the Medicines Act, there is no specific regulation regarding the advertising of medicine with a high abuse potential. The only mention made about codeine-containing analgesics, as is also stated in Guideline 2 of the Code of Advertising Practice and Procedural Guide, deals with claims allowed in the advertising thereof. Here, there are referred to the phrases, “mild pain” and “moderate pain”, that may only be used in analgesic medicine advertisements when referring to pains such as headaches and period pain (ASA, South Africa, 1994: G-6).

The Therapeutic Goods Code in Australia and New Zealand, however, places more emphasis on codeine-containing analgesics than in the SA regulations. This Code clearly states that no claim may be made that the consumption of analgesics are safe. Furthermore, no claim may be made that such agents will sedate or relief tension. The claim, ‘relief tension’, is often seen in analgesic advertisements in SA.
requirement mentioned in the Therapeutic Goods Code is that a warning statement must appear on advertisements for analgesics that inform the general public that this medicine must be used as directed, that it can be dangerous to use this medicine incorrectly, and also that consultation with healthcare professionals are of great importance if any symptoms persist (Loveday & Williams, 2006).

It is evident that Australia and New Zealand realised the danger and abuse potential of analgesics such as those that contain codeine. SA should follow this precedent set by Australia and New Zealand to curb the dangers of analgesic abuse.

4.6 CONCLUSION

From Chapter four and the investigation of pharmaceutical advertisements in print form directed at the general public, it can be concluded that SA legislation does aim to ensure that the correct legislation is in place to ensure that these advertisements adhere to the highest ethical and legal standards. The empirical study, however, will determine to what extent legislation is applied to pharmaceutical advertisements in practice.
CHAPTER 5
METHODOLOGY

5.1 INTRODUCTION

The literature review preceding this chapter formed the basis for setting the aim and objectives of this study. The primary aim of this study is to identify consumers’ perceptions of pharmaceutical advertisements.

This chapter will outline how the study was carried out. Included in this outline, the research method utilised, participant selection processes, and data collection and analysis will be discussed. Reference will also be made to ethical considerations adhered to during the study. The aim of this study was achieved by a predominantly qualitative approach combined with quantitative techniques.

The empirical study consisted of the following main activities:

- Identifying and analysing consumers’ perceptions of pharmaceutical advertisements.
- Decoding pharmaceutical advertisements.

5.2 EMPIRICAL STUDY

5.2.1 Identifying and analysing consumers’ perceptions of pharmaceutical advertisements

Determining how each consumer will perceive an advertisement of any sort will be an impossible feat. However, it is possible to gain insight into how consumers in general interpret advertisements. For this reason a focus group was conducted to determine how a sample of consumers within the NMM interpret and perceive pharmaceutical advertisements in print form. Important themes highlighted by the focus group were then incorporated into a consumer questionnaire to measure this on a larger scale within the
NMM. Results obtained were used to support the decoding of pharmaceutical advertisements as well as to determine whether these advertisements can be misinterpreted by consumers.

### 5.2.1.1 Focus group

Merton and colleagues were the first to coin the term ‘focus group’ in 1956 (Lewis, 1995). They stated that a focus group is an activity where the interviewer or facilitator asks the participants specific questions about a topic that has been researched beforehand (Lewis, 1995). Green and Thorogood (2005: 108) were more descriptive and stated that it is a small group of between six to 12 people brought together with the aim of discussing a specific topic under the direction of a facilitator. The main reason for choosing this qualitative technique, as identified by Flick (1999: 122), is that focus groups are used especially in marketing and media research. Table 5.1 identifies the main advantages and disadvantages of a focus group.

### Table 5.1 Main advantages and disadvantages of a focus group

<table>
<thead>
<tr>
<th>ADVANTAGES</th>
<th>DISADVANTAGES</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Has a high face validity</td>
<td>• Requires a trained facilitator who has knowledge about group dynamics</td>
</tr>
<tr>
<td>• Provides data more quickly and at lower cost than individual interviews</td>
<td>• Are less able to control the type of information produced</td>
</tr>
<tr>
<td>• Allows for direct interaction with respondents</td>
<td>• Small numbers and convenience sampling limits ability to generalise to larger populations</td>
</tr>
</tbody>
</table>

(Source: Barret, 2007; Marczak & Sewel, 1994)

Krueger identified three phases for conducting focus groups, namely: conceptualisation, interview (group discussion), and analysing and reporting (Marczak & Sewel, 1994). Figure 5.1 identifies the flow of these three phases as well as what each phase consists of.
Figure 5.1  Three phases used to conduct a focus group
(Adapted from:  Marczak & Sewel, 1994)

(i)  Phase 1: Conceptualisation

- Purpose of focus group

The purpose of conducting a focus group was to identify how a sample of consumers within the NMM interpret and perceive pharmaceutical advertisements. The focus group allowed for the identification of specific themes that were then incorporated into a consumer questionnaire to determine the interpretations and perceptions of a larger sample of consumers within the NMM. Information obtained from these two activities was used to support the results obtained from decoding pharmaceutical advertisements.
• **Whom to study**

*Consumers* are defined by the Concise Oxford English Dictionary (2006: 307) as people who buy goods or services for personal use. It can be assumed that when people want to buy goods or use services, they are usually first exposed to these, by means of, for example, advertisements. Consumers can therefore also be seen as people who read advertisements. It was decided to choose a diverse group of consumers from different socio-economic backgrounds representing the NMM to participate in the focus group.

• **Planning focus group**

A detailed plan was developed to outline the procedures followed in organising the focus group. This included a time line which outlined all the activities that needed to be carried out as well as the proposed time and date to conduct the focus group. Specific procedures listed in this plan included determining the size of the focus group, booking an appropriate venue, as well as a proposed budget to cover the expenses of the focus group. The plan was peer reviewed to ensure its effectiveness.

(ii) **Group discussion**

• **Participant selection**

Participants were selected by means of a convenience sample. Carl F Auerbach and Louise B Silverstein (2003: 18) refer to *convenience sampling* as “*recruiting whomever you have access to*”. Eight participants from the NMM were selected to participate in the focus group. However, two participants withdrew their participation, leaving a minimum acceptable sample of six participants. Table 5.2 identifies the demographics of the six participants.
Table 5.2  Demographics of the six focus group participants

<table>
<thead>
<tr>
<th>PARTICIPANT</th>
<th>AGE (in years)</th>
<th>GENDER</th>
<th>OCCUPATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>20</td>
<td>F</td>
<td>Student</td>
</tr>
<tr>
<td>2</td>
<td>24</td>
<td>M</td>
<td>Accountant</td>
</tr>
<tr>
<td>3</td>
<td>24</td>
<td>F</td>
<td>Teacher</td>
</tr>
<tr>
<td>4</td>
<td>25</td>
<td>M</td>
<td>Chemical engineer</td>
</tr>
<tr>
<td>5</td>
<td>26</td>
<td>M</td>
<td>Leather technologist</td>
</tr>
<tr>
<td>6</td>
<td>33</td>
<td>F</td>
<td>Medical representative</td>
</tr>
</tbody>
</table>

As most of the participants were at work during the day, a specific time at night, suitable to all, was selected. Personalised invitations, including a preamble (see Appendix A) were sent to each participant a week before the date of the focus group. Each invitation contained all the essential information (for example, the starting time, date, and location). An overview of the topic was given to each participant. Two days after delivering the invitations, each participant was contacted (with their permission) to ensure participation. Reminders were sent the night before participation.

- Development of questions

A focus group protocol (see Appendix B) was developed to provide an outline to be followed during the discussion. The protocol included an introduction, three group tasks, and a conclusion. Group task one consisted of an open-ended question about how participants view any form of advertising. In group task two, six prompts were used to discuss various topics of pharmaceutical advertising.

Group task three consisted of an activity where participants were provided with a few minutes to view the following three pharmaceutical advertisements in print form:
Phytocor® and Phytocor® Plus – a complementary and alternative medicine (a natural dietary supplement) for people suffering with high cholesterol (see Appendix C);

Panado® MedSip – a Schedule 0 medicinal drink for colds and flu (see Appendix D);

and

an erectile dysfunction awareness advertisement for a prescription medicine (see Appendix E).

The reason for selecting these three advertisements was that a general representation of pharmaceutical advertisements in SA was required. For this reason advertisements for a complementary and alternative medicine (Phytocor® and Phytocor® Plus), a Schedule 0 medicine (Panado® Medsip), and an awareness advertisement for a prescription medicine were selected.

Participants were asked to express their feelings towards each of these advertisements. The protocol also provided the time allowed for each group task.

**Skills required by facilitator**

The focus group was led by a facilitator who played a key role in its success. Facilitators are concerned with establishing a relaxed atmosphere, enabling participants to participate, and also to listen actively (Barnet, 2007; Marczak & Sewel, 1994). They should have characteristics similar to participants and also be skilled in group discussions. Further skills required to facilitate a focus group include being able to be non-judgemental as well as having the ability to encourage others to speak (Green & Thorogood, 2005: 126; Marczak & Sewel, 1994).

A facilitator with no expertise in pharmaco-legal activities was selected. This prevented participants from being inhibited in discussing their views and therefore ensured a non-manipulated outcome (Green & Thorogood, 2005: 126). A female Master’s degree student in Psychology was selected to act as facilitator as such students are equipped with the necessary skills to lead a successful focus group.
The facilitator was provided with the necessary information about the study, verbally and in written form. A discussion regarding the research topic and the focus group protocol (see Appendix B) was held with the facilitator a week before the focus group. This allowed the facilitator to have sufficient time to familiarise herself with the format of the focus group as well as identifying and discussing any problems that could exist in the protocol with the researcher before commencing with the focus group.

(iii) Analysing and reporting

- Analysis of discussion

The researcher acted as assistant during the focus group. It was the duty of the assistant to take notes, handle the recording equipment to ensure reliable data, and also provide refreshments to the participants. Analysis of the discussion started with group task one where the assistant took the necessary notes during the discussion. Notes taken focused on information such as their body language, a description of their enthusiasm, and the overall mood during the focus group (Lewis, 1995; Marczak & Sewel, 1994; Strauss & Corbin, 1990: 30). Immediately after the focus group the facilitator and assistant shared observations, discussed participants’ responses to the group tasks and the assistant’s notes taken during the focus group.

- Reporting of data

Within 24 hours after completion of the focus group, the researcher listened to the audio recording to become familiar with the data. The data were transcribed verbatim and printed. The audio recording was again listened to while following the transcript to ensure accuracy as well as to get a feeling of what was said.

Thematic analysis was conducted by using a method mirroring Tesch’s seven step technique of descriptive analysis. This was used to ensure that the process of thematic analysis occurred in a systemic and comprehensive manner (Flick, 1999: 192). The
method was applied to each of the group tasks or to each section within a group task that was conducted during the discussion.

Thematic analysis applied to this study consisted of two main steps, initial coding and focused coding, which were developed by Bogdan and Biklin to identify coding categories (University of Texas, 2007). With initial coding, each response or sentence thereof appearing on the transcript was read. The question, ‘What is it about?’, was then asked. Themes were identified and written in the right-hand margin of each transcribed page (University of Texas, 2007).

Following initial coding, focused coding was conducted. With this step, all the themes emerging from each question or task were pooled, and those with similar concepts, were grouped together to form larger categories. Thematic headings that describe these similar concepts were selected for each of these larger categories. For those themes that could not be grouped into a larger category, in other words, those themes that stood alone, no thematic heading was given (University of Texas, 2007).

These steps were applied to each group task or to each section thereof. Each thematic heading, consisting of themes with similar concepts, was discussed by means of descriptive analysis. Descriptive statements were used to discuss the findings. These were obtained by quoting excerpts from the raw data (Marczak & Sewel, 1994).

5.2.1.2 Establishing rigour in thematic analysis

Rigour is described as “strictness”, “discipline”, or “severity” (Oxford Advanced Learners Dictionary, 1989: 1091; Concise Oxford English Dictionary, 2006: 1239). Therefore, there are general principles to which a qualitative study needs to adhere to in order to ensure strictness or discipline. Judith Green and Nicki Thorogood (2005: 191) refer to these general principles as “good practices guidelines” that add credibility and also increase faith in the study’s reliability and validity. The criteria identified by Green and Thorogood reflect Lincoln and Guba’s criteria set in 1985 to assess qualitative research (Flick, 1999: 120; Green & Thorogood, 2005: 191). Lincoln and Guba
propagated the following criteria: trustworthiness, credibility, dependability, transferability, and confirmability (Flick, 1999: 120).

Green and Thorogood’s criteria were adhered to in order to ensure rigour and included the following:

(i) **Transparency**

Transparency refers to the explicitness of the methods employed to analyse the data obtained from the focus group (Green & Thorogood: 2005: 192). Lincoln and Guba referred to this as *dependability* in which an actual audit trail is outlined to ensure procedural dependability (Flick, 1999: 232).

Transparency was ensured by providing a complete reference in this chapter to:

- participant selection;
- collection and recording of raw data;
- protocol (see Appendix B) followed during discussion; and
- steps followed in conducting thematic analysis.

(ii) **Maximising validity**

Kirk and Miller refer to validity as a question of whether the researcher sees what he or she thinks he or she sees (Flick, 1999: 224). According to Green and Thorogood (2005: 195), validity is the “truth” of the procedure followed.

Validity was maximised by the conducting the following activities:

- A focus group protocol was followed by the facilitator. This has been added as an appendix (see Appendix B) to allow the reader to judge the interpretations made.
- A validity check was done to ensure that the researcher’s account of the focus group was similar to that of the participants. Here, a participant was randomly selected and
provided with the researcher’s focus group interpretation and asked whether this was a true reflection of the discussion.

(iii) Maximising reliability

Reliability relates to the likelihood that a similar piece of research will elicit similar kinds of themes. This criterion improved the credibility of interpretation and also ensured that there was an identifiable rationale for the themes identified (Green & Thorogood; 2005: 194).

Reliability during the process of thematic analysis was maximised by:

- Applying good practices by following accurate transcribing procedures. This was achieved by providing the facilitator with a copy of the transcripts to comment on its accuracy.
- The thematic analysis procedure followed was discussed with colleagues and with the supervisors of the study.

(iv) Comparison

Green and Thorogood (2005: 194) stated that qualitative research is driven by comparison. By comparing cases within the same set of data, regularities within the data can be identified. This allows the researcher to explore the contextual meaning of accounts. Comparison also enables the development of theoretical analysis. This criterion was achieved by comparing the findings with data obtained from research done, not only from the field of pharmaceutical advertising but also from advertising in general.

(v) Reflexivity

Reflexivity, as defined by Green and Thorogood (2005: 194), is a criterion that recognises that the researcher is part of the process of producing the data and providing
its meaning. The aim of this criterion is to remove any potential biases that a researcher may bring to the process of data collection and analysis.

To ensure reflexive awareness the following activities were conducted:

- Methodological openness was ensured by giving an explicit account of all the steps taken in the data production and analysis thereof.
- Differentiating between the role of the researcher and the facilitator in the data production process.

5.2.2 Consumer survey

To determine how consumers within the NMM interpret, perceive or even misinterpret pharmaceutical advertisements, a survey in the form of consumer questionnaires were conducted in selected community pharmacies. The reasons for choosing a consumer survey as an information gathering tool was that this method is less invasive and therefore reduces bias. It is also a less time consuming method with regards to the researcher as well as the participants (Green & Thorogood, 2005: 36; Oppenheim, 1993: 114).

5.2.2.1 Sampling process

For the purpose of this study, 10 community pharmacies were selected within the NMM (Port Elizabeth, Despatch, and Uitenhage). According to the latest list of pharmacies provided by the SAPC in 2006, 2184 registered community pharmacies are found in SA. Of the 2184 community pharmacies, 192 are situated in the Eastern Cape Province, with 92 of these situated in NMM.

A random sampling technique was used to select 10 community pharmacies from the list of 92 within the NMM. In consultation with a statistician, a sample of 100 participants was selected for the consumer survey. Therefore, 10 customers in each of the selected community pharmacies were asked to participate on a voluntary basis.
5.2.2.2 Consumer questionnaire

The consumer questionnaire was (see Appendix F) employed to measure consumers’ interpretation, perceptions, and possible misinterpretation of pharmaceutical advertisements and consisted of four sections. Section one consisted of basic demographic questions about the participant. Questions were asked about the participant’s age, gender, and occupation. Two additional questions established whether the participant belonged to a medical aid, and whether he or she suffered from any chronic conditions such as diabetes, hypertension, or asthma. A demographic representation provided the study with a profile of the type of consumer that participated in the consumer survey.

To differentiate between the different occupations of the participants in the results chapter, 10 major occupational groups were used to classify the participants’ occupations. Nine of these groups were based on a simplistic version used by The National Centre for Social Research in Britain to classify the major groups of occupations (National Centre for Social Research, 2004). A tenth group, pensioners and unemployed, was added as a result of the economic instability in the NMM. Table 5.3 identifies these groups and provides a broad description of each. These groups were selected to determine if the sample of consumers participating in the consumer survey is representative of the NMM in terms of their occupations.

Section two consisted of a range of mass media forms such as television, radio, newspapers, magazines, and the Internet. Two additional forms of print media were added to these mass media forms, namely pharmacy newsletters and handouts or flyers. This section aimed at determining consumers’ preferences regarding the type of media they are exposed to. A time-scale (daily, three to six times per week, one to two times per week, once a month, or never) was used to identify the frequency of exposure to such media. The aim of this section was to identify the extent to which consumers are exposed to print media, and thus exposed to pharmaceutical advertisements.
Table 5.3  Classification of the ten major occupational groups of participants

<table>
<thead>
<tr>
<th>MAJOR OCCUPATION GROUPS</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Managers and senior officials</td>
<td>This occupational group consists of middle management such as general managers, senior managers, and marketing managers.</td>
</tr>
<tr>
<td>Professional occupations</td>
<td>These are specialists in the fields of science, building, engineering, health sciences, and social sciences and include, for example, lecturers, teachers, doctors, lawyers, and accountants.</td>
</tr>
<tr>
<td>Associate professionals and technical occupations</td>
<td>These are employees with theoretic and practical knowledge and usually include technicians in the fields of healthcare, sciences, engineering, building, entertainment, and transport.</td>
</tr>
<tr>
<td>Administrative and secretarial occupations</td>
<td>This occupational group consists of clerical workers, for example, receptionists, storekeepers, mailing clerks, and secretaries.</td>
</tr>
<tr>
<td>Skilled trade occupations</td>
<td>This group consists of employees who have trade-specific knowledge in fields such as vehicle production, electrical and electronics, mechanics, and food preparation.</td>
</tr>
<tr>
<td>Caring, leisure, and other personal service occupations</td>
<td>These are employees involved in child caring, auxiliary nursing, travelling, hairdressing, and domestic activities.</td>
</tr>
<tr>
<td>Sales and service occupations</td>
<td>This occupational group consists of employees that are engaged in buying, broking, and selling.</td>
</tr>
<tr>
<td>Process, plant, and machine operations and drivers</td>
<td>This group represents employees that operate vehicles and other large equipment to transport goods, materials, or passengers.</td>
</tr>
<tr>
<td>Routine unskilled occupations</td>
<td>This group consists of workers that perform routine tasks manually or by using hand tools and appliances, for example, cleaners, construction workers, mail sorters, waters, traffic wardens, security guards.</td>
</tr>
<tr>
<td>Pensioners and unemployed</td>
<td>This group consists of people who are retired or those who have no monetary income.</td>
</tr>
</tbody>
</table>

(Source: National Centre for Social Research, 2004)

Section three and section four consisted of specific statements regarding the themes that were pertinent during the focus group. Statements used in section three dealt with topics such as the information provided in pharmaceutical advertisements and the degree of understanding thereof, whether such advertisements are false or misleading, and the use of colour and pictures. In section four, two of the three pharmaceutical advertisements used in the focus group were selected, namely the Panado® MedSip (see Appendix D)
and the erectile dysfunction awareness advertisement (see Advertisement E). Four specific statements accompanied each of these advertisements. These statements were identified from the focus group. A Likert scale (agree, disagree, and undecided) was used in section three and section four to measure participants’ responses to the statements used.

5.2.2.3 Survey process

The consumer survey was conducted in the selected community pharmacies by the researcher and a field worker. The field worker was briefed on the research topic and how to conduct the consumer survey. A pilot study was first conducted to ensure viability of the questionnaire. Ten percent of the participant sample (10 participants) was used to conduct the pilot study.

In order to reduce interference with business activities, customers who were waiting for their prescriptions to be filled, were asked to participate on a voluntary basis. The researcher or field worker provided an overview of the study to each participant after which each statement or question was dictated and the necessary responses captured. In section four, participants were exposed to the selected pharmaceutical advertisements and provided with a few minutes to familiarise themselves with these advertisements. Statements to these advertisements were dictated to each participant and their responses were captured. After completion of each questionnaire, the participant was thanked for their participation.

Data obtained from the consumer survey was captured and statistically analysed by means of descriptive and inferential statistics. Microsoft Excel® was used for this purpose.

5.2.3 Decoding pharmaceutical advertisements

Pharmaceutical advertising can be seen as a method in which the pharmaceutical industry communicates with consumers. It can thus be assumed that the basic communication
model (sender-message-receiver) also applies to pharmaceutical advertisements. Such advertisements will therefore also be encoded (usually by advertising agencies) in a similar fashion as verbal messages, and then sent via a medium (such as print media) to consumers (for example, pharmacists, doctors, or patients). Consumers in turn, decode advertisements to give meaning. The difficulty lies in investigating the decoding process of consumers, that is, the identification of the consumers’ understanding of and perception towards the advertisements.

It is an impossible feat to determine how each consumer will interpret a pharmaceutical advertisement. However, through the process of decoding pharmaceutical advertisements, each component, lexical and visual, was interpreted to provide meaning to these components. Simply put, decoding is the process of “finding the meaning” of something (Oxford Advanced Learner’s Dictionary, 1989: 310; Concise Oxford English Dictionary, 2006: 372).

The meaning of the components found in pharmaceutical advertisements was determined by employing the most appropriate pre-selected criteria. These criteria consisted of three sections, namely semiotic criteria, colour interpretation, and legal and ethical criteria. Each of the three pharmaceutical advertisements discussed in the focus group was subjected to the decoding process.

**Semiotic criteria** used to decode these three pharmaceutical advertisements were selected from the semiotic aspects outlined in Chapter three. Firstly, the most fundamental part of an advertisement, the *sign*, was identified in each of these advertisements. This was followed by the identification of the following basic semiotic concepts that supported a sign:

- *signifier* and *signified*;
- *connotation* and *denotation*; and
- *index, icon, and symbols.*
The referent system was also identified in each of the pharmaceutical advertisements. Where applicable, other additional semiotics concepts (for example, desire, mirror-phase, and appellation) present in the decoding advertisements model (see Figure 3.8, Chapter three), were also identified.

To support the results obtained from the semiotics criteria, the meanings behind each of the colours incorporated in these pharmaceutical advertisements were identified. This was achieved by using the psychological and symbolic interpretations of these colours obtained from Chapter three.

Legal and ethical criteria pertinent to pharmaceutical print advertisements in SA were used as criteria to identify if these pharmaceutical advertisements adhere to such standards. These ethical and legal criteria were obtained from the Section 4.3 covering the Forensic aspects of pharmaceutical advertising in South Africa in Chapter four.

The criteria used to decode the three pharmaceutical advertisements assisted the researcher in determining areas where consumers can misinterpret these advertisements, or even where they may be misled.

5.3 ETHICAL MEASURES

Ethical measures were taken in conducting the focus group and consumer survey. This study was approved by the Faculty of Health Sciences’ Research, Technology and Innovation Committee (FRTI) of the Nelson Mandela Metropolitan University (NMMU).

5.3.1 Ethical measures followed in focus group

Firstly, it was important to inform each of the six participants about the study and the focus group. This was done verbally, where a brief overview of the research topic was given, and also in writing by means of a preamble (Appendix A). The preamble provided each participant with knowledge of the focus group.
Informed consent was obtained from each of the six participants before participation was allowed. This was obtained by means of providing participants with consent forms (see Appendix G). The consent form informed each participant of various aspects covered in the focus group. The participant was also informed that participation is voluntary. Informed consent was only obtained once the participant understood and signed the consent form.

Each participant was informed, in the consent form as well as before the start of the focus group, that a voice recorder will be used to record the discussion. Participants were also assured of confidentiality and anonymity during and after the focus group. No names were mentioned during the discussion and the transcribing process. The voice recorded data was destroyed after completion of the study.

During the discussion participants were allowed to express their views. Their reviews were respected by the facilitator and the researcher. Participants were also informed that they could contact the NMMU Psychology Clinic should they require any counselling after completion of the focus group.

Following the selection of each of the three pharmaceutical advertisements (see Appendices C, D, and E) used for Task three of the focus group and Section four of the consumer survey, permission to use these advertisements was asked from each of the pharmaceutical companies. Each pharmaceutical company was asked by means of electronic-mail (e-mail) for their permission. All three pharmaceutical companies responded via e-mail and granted permission.

### 5.3.2 Ethical measures followed in the consumer survey

As the consumer survey was conducted in 10 of the community pharmacies within the NMM, the owner and/or responsible pharmacist of each of these pharmacies was provided with a preamble (Appendix H) and a consent form (Appendix I). The preamble outlined the study whereas informed consent was obtained by means of signing the consent form. The consent form also clearly stated that participation was voluntary.
Participants were not provided with a preamble but were verbally informed about the study. Anonymity was ensured at all times as participants’ names were not recorded and no community pharmacy’s name was published.

Participants were also verbally informed that participation is voluntary. No incentives were provided to participants. Only participants waiting for their prescriptions to be filled were asked to participate in the study. This ensured that business activities were not disrupted.

The findings of each of the components in the empirical study are presented in Chapter six.
CHAPTER 6
RESULTS

6.1 INTRODUCTION

In this chapter the results regarding the empirical part of the study will be investigated. This will include the investigation of the results obtained from the focus group, the consumer survey, and the decoding of pharmaceutical advertisements. The results obtained from the focus group and the consumer survey will be used to support the decoding of pharmaceutical advertisements.

6.2 FOCUS GROUP

The aim of this focus group was to identify the perceptions of consumers towards pharmaceutical advertisements. Thematic analysis was conducted in each group task or topic question (see Appendix B for Focus Group Protocol) to identify themes. Themes with similar concepts were grouped together and placed under a thematic heading. Those themes that did not share the same concept were placed without thematic headings. Themes were discussed by quoting excerpts from the discussion. The excerpts will be presented in italics, and where applicable, translated into English.

6.2.1 Summary of focus group

A relaxed atmosphere was created by the intimate location and the willingness of each member to participate in each group task. It was evident that the ice breaker used by the facilitator helped the participants to acquaint themselves with the group. The topic was well accepted as participation in each group task was excellent. It was thus evident that the group tasks were well selected. Body language of participants was in general seen as positive as they were open to expressing their perceptions towards pharmaceutical advertisements. Although participants mostly shared their opinions about pharmaceutical advertisements in print form, some also discussed other media used to advertise
medicinal products such as the Internet and television. The researcher and facilitator concluded that this focus group was a success.

6.2.2 Group tasks

6.2.2.1 Group task one

Participants were asked an introductory question about their opinions on any form of advertisement in print form (see Appendix B for Focus Group Protocol). No specific themes emerged from this discussion as most participants only provided short answers. Female one responded first and stated that she always looked at the cost of the products advertised. She said: “How much it costs”. Male one thought that an advertisement must be capable of attracting consumers’ attention. He said: “...it must be striking. You must see it immediately...”. Male three was of the opinion that advertisements provide consumers with instructions. He said: “It tells you what to do”. The final opinion, similar to that of male three, was provided by female two who thought that advertisements should be of a useful nature. She said: “It has to be useful”.

6.2.2.2 Group task two

In group task two (see Appendix B for Focus Group Protocol) prompts were used to discuss the six topics regarding pharmaceutical advertisements: emotional advertising, misleading advertisements, comprehension of pharmaceutical advertisements, aesthetics, buying pharmaceutical products or services advertised or asking healthcare professionals about these, and the advertising of prescription medicines.

Table 6.1 lists the themes and its thematic headings, where applicable, that emerged from the discussion of these topics.
Table 6.1 Themes and thematic headings identified in each topic

<table>
<thead>
<tr>
<th>THEMATIC HEADINGS</th>
<th>THEMES</th>
</tr>
</thead>
<tbody>
<tr>
<td>EMOTIONAL ADVERTISING</td>
<td>Emotional impact</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>MISLEADING ADVERTISEMENTS</td>
<td>Irrelevant and false issues</td>
</tr>
<tr>
<td>COMPREHENSION OF PHARMACEUTICAL ADVERTISEMENTS</td>
<td></td>
</tr>
<tr>
<td>Understanding pharmaceutical advertisements</td>
<td>Degree of understanding</td>
</tr>
<tr>
<td></td>
<td>Information provided</td>
</tr>
<tr>
<td>AESTHETICS</td>
<td></td>
</tr>
<tr>
<td>Appeal</td>
<td>Attraction</td>
</tr>
<tr>
<td></td>
<td>Comprehensibility</td>
</tr>
<tr>
<td>BUYING PHARMACEUTICAL PRODUCTS OR SERVICES ADVERTISED</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Buying experiences</td>
</tr>
<tr>
<td>ADVERTISING PRESCRIPTION MEDICINES</td>
<td></td>
</tr>
<tr>
<td>Prescription medicine advertised to the general public</td>
<td>Quantities and addiction</td>
</tr>
<tr>
<td></td>
<td>Professionals and the</td>
</tr>
<tr>
<td></td>
<td>pharmaceutical industry</td>
</tr>
</tbody>
</table>

(a) EMOTIONAL ADVERTISING

Originally this topic consisted only of one question but the facilitator felt it best to ask a two-part question. Firstly, participants were asked if pharmaceutical advertisements affected them on an emotional level, followed by the question about whether they believe such advertisements have an impact on the emotions of people suffering from chronic diseases. All participants agreed that these advertisements do make an impact on the emotions of consumers, especially those suffering from chronic diseases. A theme emerged from each of these questions and was placed under the heading, *emotional impact.*
Emotional Impact

i. Attention

Participants believed that the aim of pharmaceutical advertisements is to attract the consumer’s attention. One way in which a consumer’s attention can be attracted is by means of humour. According to female three, anything that makes her laugh has an effect on her emotions. Although she used a television advertisement as an example, the same can be applied to print advertisements. She said: “There’s this advertisement on television going: ‘Eish Joe!’. I laugh every time...something that makes me laugh must then touch a sense of mine...that’s a feeling too”.

An interesting opinion was raised about how these advertisements can be emotionally appealing to consumers who have the desire to look similar to models appearing in them. Male two used advertisements of body builders as an example and said: “...I am much into men's magazines...If you want to look like that person on the cover, or in the ad...it can influence you”. Male one added: “Aah, it can show you what you can get out of it. If you have mass builders and those things advertised”. He furthermore stated that the models used in the advertisements create this desire which will attract consumers’ attention. He said: ‘...and you have this nice body and nice woman there...something like that has to stick. Like: ‘I want to look like that’”.

ii. Desperation and death

This theme emerged from the second part of the question regarding the emotional impact pharmaceutical advertisements can have on people with chronic diseases. Male one felt that such advertisements will easily create attention among people that have chronic diseases and those that are dying. He said: “It will strike his attention, you know”.

Desperation was also used as an opinion. Some participants believed that such people will be more emotionally affected by pharmaceutical advertisements. Female two felt that vulnerable people, such as the terminally ill, will do anything to live longer. She
stated: “Kyk as jy wil gesond raak sal jy enige iets, enige iets betaal...Jy glo enige iets” (“Look, if you want to be healthy again, you will pay any, any thing...You believe anything”). Male one also believed that desperation plays a major role when the terminally ill are exposed to these advertisements. He said: “...They strike you as much as they say. The real problem is, I mean, he is gonna die pretty soon. So, he will do anything to live a bit longer”. Female two felt that the thoughts of death can evoke many negative emotions. She had the following opinion of the terminally ill: “...that will frighten anyone...Fear of death and losing everything will make you do anything”. Male one felt that people who are dying will respond to advertisements which advertise products that may give them hope of living longer. He said: “...if there’s something that will, that, that will help me to live longer immediately...go and buy it”.

Female three was also of the opinion that false and misleading claims can often be made in advertisements, especially those directed at the terminally ill. She stated: “...There is a lot of bogus out, out there”. Female three used the controversial HIV ‘cure’ widely advertised by the Minister of Health in South Africa to explain: “...I recently looked at a lot of HIV things out there and I got to a site where they had Manto’s picture up...’Bolox’ better than ARV-drugs...En beetroot and garlic, en ek weet nie wat alles nie” (...And beetroot and garlic, and I don’t know what else). Female three argued: “Hulle gaan dit vat (They will take it). Dan dink hulle nou (Then they think): ‘It’s gonna cure it!’”.

Male one felt that economics also play a role in why advertisers will direct their advertisements at vulnerable people. He stated: “They want to make money. So, what are they gonna do? If I have Aids or [pauses] you have cancer...They will sell it. Because they will tell you: ‘No, but it’s curing it’”. Female two believed that advertisements are often directed at people who are unable to differentiate between what is true and what is false. She said: “Especially uneducated people...plays on uneducated people...Like we here know exactly that there isn’t a cure for Aids...But there might be millions of people out there who still don’t know that Aids isn’t curable”. She also explained that this will mislead the terminally ill and said: “...they will fall for everything and anything that you tell them. And that is, it plays on their emotions”.
(b) MISLEADING ADVERTISEMENTS

Participants were asked whether they believe that pharmaceutical advertisements are misleading. All participants felt that pharmaceutical advertisements can often mislead consumers. One theme, *irrelevant and false issues*, emerged from the discussion.

**Irrelevant and false issues**

Participants discussed this issue by giving opinions about pharmaceutical advertisements that provide irrelevant and lacking information as well as false claims. They seemed to believe that this may result in consumers being unable to make conscious and informed decisions when interested in buying pharmaceutical products.

Female two felt that pharmaceutical advertisements are of a misleading nature. She said: “*The first thing that hit me, that it’s, it’s very misleading*”. Her argument was that pharmaceutical products are falsely represented in advertisements as definite cures. She said: “*It will help you immediately with what you have...And it works for you. And that’s not always the case*”. Female two furthermore stated that advertisers do not mention the important information. She said: “*...it comes across as there’s no side-effects*”.

Another issue raised by the group dealt with slimming products and muscle-gaining supplements. Participants complained that advertisements for these products incorporate photographs of male and female models to create the image that a person will look similar after using it. Male one said: “*And they always have this build men and this nice woman walking around with this mass builders*”. He argued that consumers are often misled by these advertisements because such products should mainly be used in conjunction with a diet or an exercise program. Male one said: “*You can lose this amount of weight if you use this guide or practice this much. ‘I don’t want to practice!’*” Female one agreed: “*...in die advertensie sê hulle nie daar is ’n dieet nie. Eers wanneer jy koop en jy lees die aanwysings...*” (“*...in the advertisement they don’t say that there is a diet. Only when you buy the product and read the instructions...*”).
It was male one’s opinion that these advertisements are therefore designed in such a way as to mislead consumers into buying what is advertised. He said: “At the end of the day they never look like I did...it’s a lot of times misleading but that’s how they strike you...that’s how they get you to go and buy the product”. Female two agreed: “Ja (Yes), they hit a nerve”. She also referred to such advertisements appearing on television and stated that important information is deliberately placed in small print at the bottom of the screen in order to be read with difficulty. Female two also alluded to the fact that beautiful people are placed in these advertisements to deter consumers from reading important information. She said: “And like on TV they put it in tiny, tiny letters in the bottom of the screen: ‘In conjunction with a kilojoule controlled diet’...You not looking at it. You’re busy looking at the beautiful person on the screen...”.

Male two believed that such advertisements make exaggerated and false claims by stating goals that are unlikely. He said: “...you can lose weight in three days. You can try that...”. Male one said that he received such an advertisement in the form of an electronic mail (e-mail). He shared: “I, I actually got a nice e-mail the other day about how I can lose 25 kilo’s in seven days”. Participants were amazed by such a claim being made.

Male three also referred to the muscle-gaining supplements being advertised in magazines and raised concern about information not stated. He asked: “I also think, those USN products, do they tell you what the side-effects are, who should and shouldn’t use them?...Does it indicate all those things?”. Male one responded and stated that these advertisements are not forthcoming. He said: “They don’t tell you on the, the advertisement”. Female two confirmed that such information is not found on the advertisement but rather on the product’s package. She said: “On the package, ja (yes)”.  

(c) COMPREHENSION OF PHARMACEUTICAL ADVERTISEMENTS

The topic during this discussion was to identify whether the participants were of the opinion that pharmaceutical advertisements are difficult to understand. Most participants seemed to agree that pharmaceutical advertisements can often be difficult to understand.
Two major themes emerged from the discussion and were placed under a thematic heading, *understanding pharmaceutical advertisements*.

**Understanding pharmaceutical advertisements**

**i. Degree of understanding**

Female three stated that pharmaceutical advertisements in print form are not always clearly understood. She said: “...that ones are very, very difficult to understand...”. Male one agreed but reasoned that a proper explanation cannot be given due to limited space. He stated: “...because they don’t always have the space...it’s normally short and sweet...just enough to get your attention”.

**ii. Information provided**

Male two felt that many consumers are unaware of what is advertised. He said: “You don’t know what it is or what does it do, what it is for...” Male three agreed and used Benylin® advertisements as an example: “...you get to the pharmacy, and it’s Benylin this and Benylin that”. Female two agreed and said: “Ja, then there’s a whole range”.

Female three believed that pharmaceutical advertisements led consumers into buying certain products for certain conditions and symptoms. She used the treatment of sinusitis as an example and said: “You have a sneeze – Sinutab!...Of wat is daai goed se naam? (Or what is the name of that stuff?) Sinumax!...so, that actually says that you must ask for Sinumax when you have a sinus headache...”. Male one agreed and was of the opinion that consumers believe everything stated in pharmaceutical advertisements. He explained: “’That one I saw in the advert is the one I want’. ‘But why you want?’ ‘No, because in the advertisement it says it helps for this and that’.”
(d) AESTHETICS

The group was asked whether colour and pictures appearing in pharmaceutical advertisements attract their attention. Participants agreed that colour and pictures easily attract their attention. Although confirming this, no mention was made to the role of colour during this topic’s discussion as participants focused more on the role of pictures. Two themes emerged and were placed under the thematic heading, appeal.

Appeal

i. Attraction

Participants seemed to believe that advertisements are more attractive if a picture is added. Female two confirmed and said: “Pretty pictures”. She also added that these pictures make advertisements more interesting to read. Here, she compared pharmaceutical advertisements to University text books: “Like even at University, a text book with just a bunch of writing in it, I don’t even open it...if it hasn’t nice pictures in it”.

ii. Comprehensibility

Some participants felt that pictures in advertisements improve the degree of understanding. Female two said: “And some pictures are a lot better to understand than a whole bunch of big words”. She added that pictures improve the readability of the advertisement by saying: “...and its less effort to read it”. Male two used a well-known phrase to support female two’s opinion: “...a picture can tell a thousand words”.

(e) BUYING PHARMACEUTICAL PRODUCTS AND SERVICES ADVERTISED

Participants were asked whether they have visited a pharmacy or asked a pharmacist or general practitioner about a specific product advertised. Participants were divided in their opinions. Many expressed their experiences regarding medicines bought and those seen in pharmaceutical advertisements. The theme, buying experiences, emerged.
Buying experiences

Although female one expressed how she bought a product after seeing it in a pharmaceutical advertisement, other participants discussed how they received different products than those seen in advertisements. Female one shared her experience by explaining how she bought a hair supplement after reading about it in an advertisement. She said: “...Ek het al. Ja, daai Nu Hair®, daai funny goed wat keer dat jou hare nie uitval nie (I have. Yes, that Nu Hair®, that funny stuff that prevents your hair from falling out)”.

Female three explained that customers often get different medicines to those seen in advertisements due to unforeseen reasons. She said: “...on an occasion when I went for a certain product, I got a different product because that specific product was out of stock. So, it’s not always the case that you go to the pharmacy and ask for that...”. Male one agreed: “...ja (yes), a lot of times when you go actually in looking for something, you end up walking out with something else...”.

In contrast to these opinions, female one explained why she thinks customers often get different products: “Ja, maar gewoonlik as jy in die apteek in gaan sê jy nie gewoonlik jy wil daai produk hé nie, Jy sê wat makeer...dan gee hy vir jou (Yes, but usually if you go to the pharmacy you don’t say what you want. You say what’s wrong...then he will give you)”. In response male two said: “Some people know exactly what they want...they will just tell the pharmacist they want that”.

Female three also provided another point of view. She seemed to believe that another reason why customers often get different products than those advertised is because of the fact that pharmacies have limited shelf space and that they want to sell slow-moving products. Female three explained: “you have shelf space and all that type of things, nê. If you want to get rid of stock, if that thing is for coughing then you will seek that one for a dry cough rather than, than the other one...because obviously, number one, you don’t have the stock, and number two, you want to get rid of the stock”.
From this discussion, even though the majority of participants discussed how customers receive different products than those advertised, it can be concluded that most of the participants believe that consumers often buy products after seeing and reading about it in pharmaceutical advertisements.

(f) ADVERTISING PRESCRIPTION MEDICINES

According to the Medicines and Related Substances Act, Regulation 45 (2)(b) regarding the advertising of medicines, Schedule 2 to Schedule 6 medicines may not be advertised to the general public in South Africa. With this in mind, participants were asked if prescription medicines should be advertised to the general public.

The group was in agreement that such advertisements should not be directed to the general public. Female two boldly stated that these advertisements are partly responsible for the escalation of drug addiction. She stated: “There are enough addicts already.” Two themes emerged and were placed under the thematic heading, prescription medicine advertised to the general public.

Prescription medicine advertised to the general public

i. Quantities and addiction

Participants seemed to be concerned about pharmaceutical advertisements not providing specific information that is needed. This issue emerged from female three’s opinion that customers can only buy a certain quantity of scheduled medicines. She said: “...But most of the time I can only buy five Myprodol’s. So, what’s the use?...They should say something in there, maybe you can only get five. Maybe they should specify that because ‘I don’t understand why I can only get five tablets’...’I want 20!’”. Female two agreed that customers want to buy more than the amount allowed. She said: “It’s all or nothing, ja (yes)”. Female three explained that customers can often become agitated. She explained: “‘Ek betaal dan vir dit! Hoekom kan ek nie kry nie? (I pay for it! Why can’t I get it?)...I think that’s the general thought of the public out there”. Female two agreed:
“Ja (Yes). They get upset when you say: ‘You only get five’. Female one added that customers want to know why they can only buy a certain number of capsules. She said: “Hulle wil weet hoekom dit geskedeure is...Hoekom kan hulle dit nie gebruik nie? ‘Is daar dan iets in?’...(They want to know why it is scheduled...Why can’t they use it? Is there something in it?...)”.

Male one underlined that these advertisements can be misleading if necessary information, like quantity, is omitted. He stated: “…That’s why they not totally, clearly, totally advertising that you only get five. That’s where it gets misleading”. Male one added: “I see Myprodol® and it works for headaches, pain, and fever. And I sommer (just) say: ‘If I wanna buy a lot ‘a Adco-dol®. I’ll buy a 100 Adco-dol®’s”.

Another issue mentioned by female three dealt with the assumption made about customers who buy larger quantities of medicines for use at home. She believes that customers are often labelled as addicts when they buy larger quantities. Female three said: “And you might not use it as an addict. Maybe you want just to keep it in your house...Now they treating everyone as a potential addict. And they say: ‘Mam, I can only sell you 20. Five days!’”. Male one also stated that healthcare professionals assume that customers are addicts when buying larger quantities. He explained: “’What is in it that I can only get five? Do you think I am an addict? Are you accusing me of being an addict?’”.

Female two speculated that consumers want larger quantities of medicines because they are unaware of the pharmacy laws that prohibited the selling of large quantities of Schedule two medicines. She said: “People don’t know the law”. Male two agreed and said: “Exactly!”.
ii. Professionals and the pharmaceutical industry

Participants continued with the issue of addiction and seemed to believe that healthcare professionals such as doctors should also be involved with this issue. Here, female two argued that it is dangerous to advertise prescription medicines to the general public as people may become addicted. For this reason she thought it be best not to advertise in print media and suggested that doctors should advertise these scheduled medicines. Female two said: “...Like prescription drugs are either addictive or they have serious consequences for the patient to take them. So, in a sense, the doctor should be the advertiser of it...’If you need it I’ll give it to you. If you don’t need it, don’t need it, take this’”. Male one added: “...you must also behave in a professional manner”. He believed, however, that it is difficult for these pharmacists to act in a professional manner because of the amount of pressure caused by these pharmaceutical advertisements. Male two said: “...So, what can you now do if they just advertise it?”.

Pharmaceutical companies were also blamed of being unprofessional as it was believed that these companies use suspicious advertising techniques. Participants used the erectile dysfunction treatment, Viagra® and those produced by the pharmaceutical company, Lilly (Cialis®), as examples to explain how such scheduled treatments are advertised without breaking the law. Female three referred to the fact that these advertisers omit the names of the treatments as scheduled medicines may not be advertised to the general public. She referred to these types of advertisements as “a preview”. By also referring to the issue that the names of these medicines are omitted in advertisements, female two felt that these companies find ways to manipulate the law in order to advertise these treatments. She said: “They are using it as a loop-hole...’What they want, what actually to do is, eh, give you an open mind. ‘Listen here, if you have erectile problems, there is something that give you 36-hours of freedom’”.
6.2.2.3 Group task three

Participants were exposed to three pre-selected pharmaceutical advertisements: a complementary and alternative cholesterol-lowering product, Phytocor® and Phytocor® Plus (see Appendix C), a Schedule 0 cold and flu treatment, Panado® MedSip (see Appendix D), and an erectile dysfunction awareness advertisement (see Appendix E). After providing them with time to read through these advertisements, participants were asked to express their impressions about each advertisement.

Six themes emerged during the discussion of these three advertisements. Two common themes, *Visual characteristics* and *Print characteristics*, were shared between the Phytocor® range and Panado® MedSip advertisements. These two themes were grouped under one thematic heading, *Visual and lexical aspects*.

**Visual and lexical aspects**

i. **Visual characteristics**

It was apparent that the presence of a picture, a hand holding a large, red heart, resulted in the Phytocor® advertisement being more attractive as three members discussed this issue. Male three brought attention to this issue, although not connected to the narrative of this advertisement, and said: “...ek hou van die hartjie. So Valentynsdag” (...I like the little heart. So Valentine’s day)”. The picture also attracted the attention of female one and she said: “Dit vang mens se oog dadelik (It immediately catches one’s eye)”’. Female one also said: “Wel, ek sal hom koop net vir die prentjie (Well, I will buy it just because of the picture)”’. Female three added: “...that is the first thing they see...the nice picture...”.

Another visual aspect that emerged from the Phytocor® advertisement was the descending green line. Male three speculated that there will probably be a reason for this green line by saying: “There will be a reason for the green line going down...All the positives down to the negatives going straight down the line”.
The picture that was presented in the Panado® MedSip advertisement did not attract such attention as the first advertisement. Some participants, however, mentioned this picture only later on in the discussion. Female one briefly referred to the picture by asking: “Wat lê daar by die koppie? Heuning? (What is that lying there? Honey?)”.

Colour played a more prominent role in the Panado® MedSip advertisement than in the Phytocor® advertisement. Female two was in favour of the bright yellow colour. She referred to this colour as “eye catching”. Male two and female three, however, disliked this colour. Female three stated: “...this yellow doesn’t do it for me...I would never have looked at this thing. I must be honest”. Although various bright colours were apparent in the Phytocor® advertisement, little attention was given to it during the discussion. The only mention made to it was when male three briefly referred to the colour of the descending line. He said: “…a reason for the green line...”.

ii. Print characteristics

This theme focused on the words, sentences, and phrases found in the first two advertisements. An issue raised in both advertisements was that some of the print was too small to read, especially the fine print that appeared at the bottom of both advertisements. Male one confirmed this by saying: “The fine print is too small”. He reinforced his view: “She [pointing to female one] can’t even read the normal stuff without her glasses. How is the person who can’t even read that, if she can’t”. Female showed her inability to read the fine print by saying: “Wel, ek sal hom koop net vir die prentjie (Well, I will buy it just because of the picture)”.

Male one felt that the fine print represents the product’s negative facts. He said: “…the negatives are too small. Take the positives, it is the whole page…the negatives are too small”. According to him the advertiser can then not be blamed if any side-effects occur when taking this medication. He said: “…when you have a problem they’ll tell you [sarcastically]: ‘Well, didn’t you read the fine print?’”. Male one again stated that a person who has difficulty reading will not be able to do so. He again said: “How is she supposed to?”.
Some participants also referred to the fine print that appeared in the Panado® MedSip advertisement. Female two said that this medicinal drink should be administered at recommended doses, as stated in this advertisement. Female one then again referred to the fact that the print was too small to read. She said: “Ja, maar dit is ook baie klein (Yes, but this is also very small)”.

Another characteristic that emerged from both of the first two advertisements was their sales pitch. In the Phytocor® advertisement participants thought that phrases will attract vulnerable consumers. Female two alluded to this and said: “...something that you get in everyone of these ads is the punch line, ‘Protect your heart’, and so someone who has heart trouble, that’s the first thing they see...and then it hits home”. Female three agreed with female two and reinforced this by sarcastically saying: “Phytocor, Phytocor”.

Female two raised the same point by referring to the phrase, “Just like chicken soup”, in Panado® MedSip. She stated that such a phrase will easily attract consumers’ attention. Female two said: “You see the punch line and that is it”. Female three also argued that consumers’ attention will only be focused on such a phrase. She said: “Jy, jy lees nie hier nie (You, you don’t read here)”. Female two mentioned that this phrase in the advertisement is aimed at mothers. She said: “...effective remedy, safe, ‘star’, effective remedy for pain and fever MOMS choose...So, it hits moms”. She explained that such a phrase can play on the emotions of a mother and said: “...In order to be a good mom you need to give your child this’”. Female two felt that this can result in a feeling of inadequacy on the mother’s part if she does not give her child Panado® Medsip. Female two said: “...She’s gonna say to herself: ‘Well, am I a good mother if I don’t give my child this?’”.

Two additional themes emerged from each of the last two advertisements. Table 6.2 identifies the themes and its thematic headings.
Table 6.2 Panado® MedSip and Erectile dysfunction awareness advertisements: Themes and thematic headings

<table>
<thead>
<tr>
<th>THEMATIC HEADINGS</th>
<th>THEMES</th>
</tr>
</thead>
<tbody>
<tr>
<td>PANADO® MEDSIP</td>
<td></td>
</tr>
<tr>
<td>Conventional treatment versus alternative treatment</td>
<td>Traditional remedies</td>
</tr>
<tr>
<td></td>
<td>Medicines and food</td>
</tr>
<tr>
<td>ERECTILE DYSFUNCTION AWARENESS ADVERTISEMENT</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Legal and ethical considerations</td>
</tr>
<tr>
<td></td>
<td>Legal pharmaceutical advertising</td>
</tr>
<tr>
<td></td>
<td>Emotional pharmaceutical advertising</td>
</tr>
</tbody>
</table>

(a) PANADO® MEDSIP

Conventional treatment versus alternative treatment

i. Traditional remedies

Female two was the first person to address the fact that the Panado® MedSip advertisement was targeted at people who believe in traditional remedies. She said: “And there’s like a traditional thing: ‘Have chicken soup and you’ll get better’”. The group agreed with female two’s opinion. Female one supported the notion that this advertisement reflects the believe that chicken soup is a good remedy for colds and flu. She confirmed this by saying: “Baie mense hou van boererate... (Many people like traditional remedies...)”. Furthermore, she referred to the other ingredients which are synonymous with various traditional remedies. She added: “...En daar’s heuning en ginger in... (...And there’s honey and ginger in...)”. As a result of such ingredients being present in this advertisement, participants seemed to believe that it will be popular among consumers. Female three said: “Baie mense gaan dit vat, ja (Many people will take it, yes)”. One participant also made reference to the fact that traditional remedies are popular among older people. Female one said: “...kyk hierso, ou mense hou van boererate (...look here, old people like traditional remedies)”. A participant also mentioned that lemon and ginger is a good combination for colds and flu. Male one said:
“Wel, as ek siek is drink ek lemon and ginger (Well, when I am sick I drink lemon and ginger).”

ii. Medicines and food

Mention was made of the comparison of medicine to food in this advertisement. The first opinion given was about the fact that chicken soup was compared with Panado® MedSip. Female one said: “Wel, hulle sê chicken. Chicken is baie lekker, so (Well, they say chicken. Chicken is very nice, so)”. There was suggested that, if this medicinal drink was compared with chicken soup, it may taste good. Female two supported this opinion by also referring to the taste and effectiveness of chicken soup. She said: “…Oh, if I am sick, ‘Panado MedSip tastes just like chicken soup’, which will make me better…”.

Male two thought that the comparison of medicine to food can often mislead consumers. He said: “…dit kan ook misleiding wees (…it can also be misleading)” and also sarcastically added: “So, dis lekker sout (So, it’s nice and salty)”. He reinforced these opinions by saying: “Taste just like: ‘Ek gaan nou lekker daai sip, nê? (That will be a nice drink, hey?)’. Female three also supported this opinion and thought that such misinterpretations could be dangerous. She said: “Wat as jy nou tannies kry, nê, wat nou sê [voice change]: ‘Jis jong (Damn), just like chicken soup, only without the chicken.’ Wat as sy nou dit in haar pot ingooi...jy kan sulke mense kry...Miskien is daar mense wat nog nooit Panado® gehad nie... (What if you get aunties that say [voice change]: ‘Gee, just like chicken soup, only without the chicken.’ What now if she threw it in her pot...you can get such people...Maybe there are people that never have had Panado®...)”. She added that such misinterpretations can occur as many people do not read the important information and only attend to phrases that appear in advertisements. Female three said: “Want somtyds, jy, jy, uhmm, laat die kleiner dingetjies uit. ‘Just like chicken soup’ (Because sometimes you, you, uhmm, leave the smaller things out. ‘Just like chicken soup’)”. Female two agreed and said: “You see the punch line, and that’s it”.

In contrast to this male one felt that it is not wrong to compare medicines to food. He stated: “I, uhmm, don’t think there’s a problem by comparing it with food...coz a lot of
people like food...If you see this you think now: ‘This is gonna taste nice, coz chicken soup tastes nice’”. However, later on in the discussion he agreed that such comparisons to food can be misleading. He said: “you think, well, ja (yes)...how stupid have I been”. Participants used various other medicines to support this argument. Male two said: “Kyk na Dicloflam...Dit het mos ‘n black currant flavour (Look at Dicloflam...It has a black currant flavour)...It doesn’t taste like it but they say on the box, ‘black currant flavour’”.

Various reasons were provided by the group why medicines are compared to food. Male one argued: “If you compare it to food people are gonna buy it”. Female two argued that, by referring to the taste in the advertisement, mothers are targeted in making decisions based on what will taste the best for their children. She said: “...children are very susceptible, like if you put something in their mouth and it tastes bad, ‘I’ll never put it in my mouth again!’ It’s like a learning curve”. Female two used Ponstan® suspension to explain: “...I remember when I was little I wanted Ponstan all the time...coz it tastes nice...”.

Male three raised a serious concern about comparing medicines to food. He said: “Ja (Yes), but remember no, chicken won’t kill you but that [pointing at Panado® MedSip] can kill you...” The group agreed with this concern that was raised.

(b) ERECTILE DYSFUNCTION AWARENESS

Legal and emotional considerations

i. Legal pharmaceutical advertising

An issue that was raised in the discussion of this awareness advertisement dealt with legal prescribing practices. This issue was raised by female three: ‘It says here: ‘So ask your doctor or pharmacist about the treatment that allows your partner the freedom to get close again.’ The doctor part I can understand but the pharmacist part... coz the pharmacist can’t prescribe...”. She explained that such wording used in pharmaceutical advertisements can irritate consumers. Female three continued by saying: “...the
pharmacist tells the patient: ‘There is a product here but you must ask your doctor’...the patient is gonna say: ‘No, no, but it says so! Why can’t you give me? It’s mos nou net (just) for erection problems, you know?’”

Although not part of print advertising, there was a discussion on Internet advertising as the website address, www.36hours-of-freedom.co.za, appeared in the advertisement. This issue was highlighted by male one who said: “…they sommer (just) give you the website address...’36 hours of freedom’. Ek dink ek moet daar ingaan (I think I must go in there)”’. A concern about such advertisements on the Internet was raised which resulted from the phrase, ‘Ask your doctor or pharmacist’. Female three said: “…but I have seen it being advertised on the Internet met ’n pryslys (price list). Then you can actually order”. Her concern was that in this print advertisement counselling by a pharmacist or doctor was encouraged but that certain medicines can be ordered from the Internet without such counselling.

Many of the members thought that it is legal to create awareness about treatments available to consumers suffering from erectile dysfunctions as long as the scheduled medicine’s name was not advertised. However, some members still complained that such awareness advertisements may be misleading. Female three said: “…even though they not stating the name of the product, this one is very misleading”.

Female two raised another dilemma that can arise as a result of the absence of the medicine’s name. She said: “…someone is gonna go into the pharmacy and somme (just) say: ‘Give me Lilly!’ They not gonna know what you talking about…”

ii. Emotional pharmaceutical advertisements

Apart from the legal aspects of pharmaceutical advertising, the group also discussed certain emotion-based aspects. Participants felt that pharmaceutical companies convey a false image to consumers of their role in various health issues. The group also thought that such advertisements target emotionally laden consumers suffering from these conditions.
Mention was made of the fact that it was thought that the company in question boasts about their role in the treatment of erectile dysfunction. Female two raised this issue and said: “...it also tries to make the company look good...it says [sarcastic voice]: ‘Brought to you by Lilly in the interest of healthy relationships’”. Her argument was mirrored by what she said: “They try to come across by saying [sarcastic voice]: ‘We care for you. We don’t want to make money, we care for you’”. She reinforced these feelings and said: “…So, kind ‘a sucking up to customers”.

Female two also argued that this advertisement targets consumers who have an emotional connection to its theme. She said: “...this ad also hits the emotions”. Female two explained: “…they give you the impression that, that this product will fix your relationship, or fix your marriage. To someone who’s desperate to fix their marriage or something, this is the only solution”. Most participants agreed with this argument. Male two labelled this form of advertising as “unprofessional pressure”. Female one shared the same thoughts: “Pressure! Ek sien dit as pressure (I see this as pressure)”. Female two felt that this was a negative form of advertising: “...it’s kind ‘a cruel in a way”.

Furthermore, male one alluded that the picture in this advertisement portrays happiness. He said: “These two people actually look happy”. Female two, however, replied: “They not gonna put two norse (unhappy) looking people there”.

6.2.3 Conclusion

Valuable information was obtained as a result of the themes that emerged from each of these group tasks. The information obtained was incorporated into a consumer questionnaire to determine the perceptions of consumers within the Nelson Mandela Metropole. Both these activities were used to assist in the decoding of pharmaceutical advertisements as well as in the discussion.
6.3 CONSUMER SURVEY

6.3.1 Introduction

In this section the results obtained from the consumer survey conducted in the NMM will be analysed to identify trends pertinent to this study. A questionnaire directed at customers in community pharmacies within the NMM was used as research tool to identify these trends.

The questionnaire (see Appendix F) consisted of four sections, demographics, mass media preferences of participants, pharmaceutical advertisements in general, and the evaluation of pharmaceutical advertisements. Each of these sections consisted of questions or statements posed to the participants. The results obtained will be discussed under each of these sections.

6.3.2 Demographics

A sample size of 100 participants (n = 100) was decided on. Fifty-four percent of the participants were females, while 46% were males. Figure 6.1 identifies the age distribution of the participants. It is evident the largest percentage of participants (40%) consisted of young adults between the ages of 18 years and 30 years. The rest of the participants were older than 30 years. The youngest participant, in accordance with the ethical criteria, was 18 years and the oldest participant 75 years.

Participants were classified according to 10 major occupation groups. Nine of these groups were based on a simplistic version used by The National Centre for Social Research in Britain to classify the major groups of occupations (National Centre for Social Research, 2004). A tenth group, pensioners and unemployed, was added as a result of the economic instability in the NMM.

Table 6.3 identifies these 10 groups as well as the number of participants (in decreasing order of frequency) belonging to each of these groups. It is evident that the sample of participants was representative in terms of occupations. The main group to which
participants belonged was the *routine unskilled occupations* group. Thirty-two percent of the participants belonged to this occupation group.

![Pie chart showing age distribution of participants](image)

**Figure 6.1 Age distribution of the participants (n = 100)**

**Table 6.3 Major occupation groups to which participants belong**

<table>
<thead>
<tr>
<th>MAJOR OCCUPATION GROUPS</th>
<th>NUMBER OF PARTICIPANTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Routine unskilled occupations</td>
<td>32</td>
</tr>
<tr>
<td>Associate professionals and technical occupations</td>
<td>11</td>
</tr>
<tr>
<td>Pensioners and unemployed</td>
<td>11</td>
</tr>
<tr>
<td>Professional occupations</td>
<td>10</td>
</tr>
<tr>
<td>Administrative and secretarial occupations</td>
<td>9</td>
</tr>
<tr>
<td>Sales and service occupations</td>
<td>8</td>
</tr>
<tr>
<td>Skilled trade occupations</td>
<td>8</td>
</tr>
<tr>
<td>Managers and senior officials</td>
<td>5</td>
</tr>
<tr>
<td>Caring, leisure, and other personal service occupations</td>
<td>3</td>
</tr>
<tr>
<td>Process, plant, and machine operations and drivers</td>
<td>3</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>
Additional information obtained from the consumer survey was that only 33% of the participants belong to a medical aid while 42% of the participants suffered from a chronic condition. No significant patterns regarding participants belonging or not belonging to a medical aid could be identified.

### 6.3.3 Media preferences of consumers

Section two focussed on identifying participants’ media preferences and how frequently they were exposed to these. Seven preferences were provided that included television, radio, newspapers, magazine, pharmacy newsletters, handouts and flyers, and the Internet. The focus of this study, however, was on print media where the focus fell mainly on magazines and to a lesser extent on newspapers, pharmacy newsletters, handouts and flyers. Pharmaceutical advertisements directly from the manufacturer appear nowadays in magazines with a limited number appearing in newspapers. The two advertisements used in this consumer questionnaire were published in well-known magazines.

Figure 6.2 identifies the number of participants exposed to each of the seven media preferences as well as the frequency of exposure. It is evident that these participants watched more television (80%) and listened more to the radio (77%) on a daily basis than any other leisure activity. With respect to print media, only 18% of the participants read magazines on a daily basis.

The reason for this finding may be due to the fact that magazines (for example, You, Huisgenoot, Fair Lady, and Drum) usually appear on a weekly or monthly basis. This finding is reinforced by the fact that 31% of the participants read magazines once or twice a week with 16% reading magazines once a month. Twenty-one percent of the participants indicated that they never read magazines. The same holds true for pharmacy newsletters which are usually only published by community pharmacies on a monthly basis. Forty-three percent of the participants read their pharmacy newsletters once a month. In contrast to this, 47% never read pharmacy newsletters. Following the popularity of television and radio, 41% of participants read newspapers on a daily basis while 33% read newspapers once or twice a week.
From these results it can be deduced that 63% of the participants could be exposed to pharmaceutical advertisements on a weekly basis (daily, three to six times per week, and once to twice a week) as they read magazines throughout the week. Forty-eight percent of the participants read newspapers throughout the week.

Figure 6.2 Participants’ exposure to media preferences (n = 100)

Figure 6.3 identifies the number of males and females exposed to the seven media preferences in a period of a week. It is evident that there is not a major difference between males and females exposed to these media preferences on a weekly basis, although females were exposed more to most of these media preferences. However, these differences between males and females could be attributed to the fact that there were more females (n = 54) than males (n = 46) in the sample. Interestingly, a similar number of males (31%) and females (32%) appeared to read magazines on a weekly basis, whereas the same number of males (39%) and females (39%) read newspapers on a weekly basis.
It is also important to determine the exposure of different age groups to the media preferences on a weekly basis. Figure 6.4 identifies the media preferences of different age groups. It is evident that young adults between the ages of 18 years and 30 years were most exposed to television, radio, newspapers, and the Internet. Within this age group, 30% of the participants revealed that they were exposed to magazines on a weekly basis. The same number (n = 30) of participants within this age group reflected that they were exposed to newspapers during the same period.

Seventeen percent of participants within the 31 to 40 year age group read magazines on a weekly basis while 22% read newspapers on a weekly basis. It was also evident that participants older than 50 years read slightly more newspapers but read fewer magazines on a weekly basis than participants in the age group 41 to 50 years. Thirteen percent of participants older than 50 years read newspapers while 12% of the participants between the ages of 41 years and 50 years read newspapers on a weekly basis. Nine percent of the participants within this age group read magazines while only seven percent of the participants older than 50 years read magazines on a weekly basis.

Figure 6.3   Number of males and females exposed to the seven media preferences on a weekly basis (n = 100)
6.3.4 Pharmaceutical advertisements in general

Ten statements regarding pharmaceutical advertisements were posed to each participant. These statements were obtained from the themes that emerged from the focus group and dealt with four specific topics namely, the comprehension of pharmaceutical advertisements, misleading advertisements, emotional advertising, and aesthetics used in such advertisements.

6.3.4.1 Comprehension of pharmaceutical advertisements

From this topic, the comprehension of pharmaceutical advertisements, two themes emerged in the focus group, the information provided, and the degree of understanding of pharmaceutical advertisements. Three statements regarding the theme, information provided, were posed to each participant while one statement was posed regarding the degree of understanding of pharmaceutical advertisements. Table 6.4 identifies the statements posed to each participant with its number in the consumer survey appearing in brackets.
Table 6.4  Statements regarding specific themes posed to participants

<table>
<thead>
<tr>
<th>THEMES</th>
<th>STATEMENTS POSED IN SECTION 3 OF QUESTIONNAIRE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Information provided</td>
<td>• I find pharmaceutical advertisements informative (3.1)</td>
</tr>
<tr>
<td></td>
<td>• I ask my doctor or pharmacist for more information after seeing a pharmaceutical advertisement (3.2)</td>
</tr>
<tr>
<td></td>
<td>• Pharmaceutical advertisements lack important information (3.3)</td>
</tr>
<tr>
<td>Degree of understanding</td>
<td>• Pharmaceutical advertisements are difficult to understand (3.4)</td>
</tr>
</tbody>
</table>

The results obtained from these statements are given in Figure 6.5. From the results it is evident that a large percentage (68%) of the participants found pharmaceutical advertisements to be informative. Sixty-five percent indicated that they will consult with a doctor or pharmacist to obtain more information after being exposed to a pharmaceutical advertisement, while 62% of the participants did not believe that these advertisements lack vital information.

![Figure 6.5](image-url)

Figure 6.5  Participants’ opinions regarding the understanding of pharmaceutical advertisements (n = 100)
However, there were mixed responses to whether participants believed that pharmaceutical advertisements were difficult to understand. There was only a small discrepancy between those participants that agreed and those that disagreed. Half of the participants felt that pharmaceutical advertisements were not difficult to understand while 43% (n = 43) of the participants felt that pharmaceutical advertisements were difficult to understand.

### 6.3.4.2 Misleading advertisements

The topic, *misleading advertisements*, resulted in only one theme, *irrelevant and false issues*, being identified in the focus group. With regard to this theme only two statements were posed in this section of the questionnaire. The first statement was a general statement while the second statement dealt with slimming advertisements which raised concern during the focus group. Table 6.5 identifies the two questions that were posed to the participants.

#### Table 6.5 Statements regarding misleading advertisements posed to participants

<table>
<thead>
<tr>
<th>THEME</th>
<th>STATEMENTS POSED IN SECTION 3 OF QUESTIONNAIRE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Irrelevant and false issues</td>
<td>• Pharmaceutical advertisements are misleading (3.5)</td>
</tr>
<tr>
<td></td>
<td>• Pictures of models used in slimming advertisements or other pharmaceutical advertisements create a false impression (3.6)</td>
</tr>
</tbody>
</table>

As can be seen in Figure 6.6, the majority of participants felt that pharmaceutical advertisements are misleading. Sixty-two percent believed that pharmaceutical advertisements were misleading while only 29% did not agree. An overwhelming 89% of the participants believed that pictures of models appearing in slimming advertisements and other forms of pharmaceutical advertisements create a false impression of the products advertised.
Figure 6.6 Participants’ opinions regarding misleading pharmaceutical advertisements (n = 100)

6.3.4.3 Emotional advertising

From this topic, emotional advertising, the thematic heading, emotional impact, emerged from the focus group. Two statements regarding this thematic heading were posed to the participants. Table 6.6 identifies the two statements posed to each participant.

Table 6.6 Statements regarding emotional pharmaceutical advertisements posed to participants

<table>
<thead>
<tr>
<th>THEMATIC HEADING</th>
<th>STATEMENTS POSED IN SECTION 3 OF QUESTIONNAIRE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emotional impact</td>
<td>• Pharmaceutical advertisements are directed at consumers who are emotionally vulnerable (3.7)</td>
</tr>
<tr>
<td></td>
<td>• Disease awareness advertisements create unnecessary fear (3.10)</td>
</tr>
</tbody>
</table>

The results obtained in Figure 6.7 revealed that 48% of the participants did not believe that pharmaceutical advertisements were directed at emotionally vulnerable consumers such as those suffering from chronic conditions. It is, however, important to note that 18% of the participants were unsure if such advertisements are directed at emotionally vulnerable consumers.
vulnerable consumers. Forty-eight percent of the participants did not believe that disease awareness advertisements create unnecessary fear amongst consumers thereby showing that such advertisements also did not have an emotional impact (fear) on consumers. Fourteen percent of the participants were undecided.

![Figure 6.7](chart.png)

**Figure 6.7** Participants’ opinions to the emotional aspects of pharmaceutical advertisements (n = 100)

The results in Figure 6.8 identifies if there was a possibility that pharmaceutical advertisements with emotional undertones may affect consumers suffering from chronic conditions such as diabetes, hypertension or asthma more than those consumers not suffering from these conditions. As mentioned, 42% of the participants suffered from chronic conditions while 58% were healthy. Of the 42% suffering from chronic conditions, 60% (n = 25) agreed that they believe that pharmaceutical advertisements were directed at consumers who are emotionally vulnerable. Forty percent (n = 17) of the participants suffering from chronic conditions believed that disease awareness advertisements create unnecessary fear amongst consumers.
In contrast to these results, 38% (n = 22) of the participants that did not suffer from any chronic conditions believed that pharmaceutical advertisements were directed at the emotionally vulnerable. However, it must be noted that 41% (n = 24) of the participants not suffering from any chronic conditions, were undecided on this issue. Furthermore, half of the participants not suffering from any chronic conditions believed that disease awareness advertisements did not create unnecessary fear amongst consumers while only 36% (n = 21) agreed with statement 3.10.

6.3.4.4 Aesthetics

The focus group discussion regarding the use of aesthetics in pharmaceutical advertisements delivered two themes under the thematic heading, appeal. The two themes that emerged were attraction and comprehensibility. Two statements were posed to each participant and Table 6.7 identifies these statements.

From the results seen in Figure 6.9 it was evident that the participants found colour and pictures in pharmaceutical advertisements attractive and eye catching. These beliefs were echoed by the fact that the majority (85%) of the participants’ attention were attracted by
colourful pharmaceutical advertisements while 79% of the participants felt that pharmaceutical advertisements were interesting when pictures appear in them.

Table 6.7 Statements regarding the use of aesthetics in pharmaceutical advertisements

<table>
<thead>
<tr>
<th>THEMATIC HEADING</th>
<th>STATEMENTS POSED IN SECTION 3 OF QUESTIONNAIRE</th>
</tr>
</thead>
</table>
| Appeal           | • Colourful pharmaceutical advertisements attract my attention (3.8)  
                  | • Pharmaceutical advertisements are interesting when pictures appear in it (3.9) |

Figure 6.9 Participants’ opinions regarding the aesthetic appeal in pharmaceutical advertisements (n = 100)

6.3.5 Evaluation of pharmaceutical advertisements

Each participant was exposed to two of the three pharmaceutical advertisements (Panado® MedSip (see Appendix D) and erectile dysfunction awareness (see Appendix E)) used in the focus group. Four statements regarding each advertisement were posed to each participant. Table 6.8 identifies the four statements.
Table 6.8 Statements regarding the two pharmaceutical advertisements to which participants were exposed to

<table>
<thead>
<tr>
<th>STATEMENTS POSED IN SECTION 4 OF THE QUESTIONNAIRE</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Panado® MedSip</strong></td>
</tr>
<tr>
<td>• I like the phrase “just like chicken soup” (4.1)</td>
</tr>
<tr>
<td>• Panado® MedSip has the same qualities as the old traditional remedies portrayed in this advertisement (4.2)</td>
</tr>
<tr>
<td>• It is dangerous to compare medicines to food (4.3)</td>
</tr>
<tr>
<td>• The yellow colour makes this advertisement attractive (4.4)</td>
</tr>
<tr>
<td><strong>Erectile dysfunction awareness</strong></td>
</tr>
<tr>
<td>• The advertised medicine alluded to can improve someone’s troubled relationship or marriage (4.5)</td>
</tr>
<tr>
<td>• My pharmacist can give this medicine without me having to see a doctor (4.6)</td>
</tr>
<tr>
<td>• I will visit the website given in the advertisement to get more information about the medicine (4.7)</td>
</tr>
<tr>
<td>• It is good to create awareness of conditions such as erectile dysfunction (4.8)</td>
</tr>
</tbody>
</table>

6.3.5.1 Panado® MedSip

The first statement (Statement 4.1) posed to participants aimed to identify their feelings toward the phrase “just like chicken soup” appearing in this advertisement. An overwhelming 63% of the participants were not in favour of this phrase. Participants were also asked (Statement 4.2) whether they perceived Panado® MedSip as having the same inherent qualities as the old traditional remedies (chicken soup and honey, lemon, and ginger) portrayed in the advertisement. An alarming 49% percent of the participants were of the belief that Panado® MedSip can be compared as being similar to the food and old traditional remedies used for colds and flu, although it contains an active ingredient (paracetamol) that can be potentially harmful if not used accordingly, especially in children. Thirty-five percent of the participants believed that Panado® MedSip did not have the same qualities as the old traditional remedies.

Continuing with the topic in Statement 4.2, Statement 4.3 identified if participants believe that it could be potentially dangerous to compare medicines to food in advertisements. In contrast to the results obtained in Statement 4.2, the majority of the participants believed that it can be dangerous to advertise such a comparison. Sixty-eight
percent of the participants felt that the comparison of medicines to food can be dangerous while only 25% disagreed.

Statement 4.4 dealt with the bright yellow background used in this advertisement. Seventy-one percent found that this bright colour resulted in this advertisement being more attractive. Twenty-five percent disliked the use of this colour. These positive results obtained supported the findings of the topic, aesthetics (see Statement 3.4) which showed that the use of colour and pictures in pharmaceutical advertisements assist in attracting consumers’ attention as well as to create interest.

6.3.5.2 Erectile dysfunction awareness

The aim of Statement 4.5 was to determine if the treatment alluded to in the advertisement can be misinterpreted as being able to improve a troubled relationship or marriage, as is portrayed by the picture of the happy, loving couple. An alarming 45% of the participants believed that this treatment has the ability to do so while only 37% disagreed.

Another controversial aspect in community pharmacy was explored with the aid of Statement 4.6. This statement determined if participants were under the impression, after reading the sentence “so ask your doctor or pharmacist about the treatment” that the Schedule 4 prescription-only treatment can be obtained from a pharmacist without having to see a doctor. The results obtained identified only a 10% discrepancy between those participants that thought that this treatment can be obtained without a prescription and those participants knew that a person first had to visit a doctor. Thirty-seven percent of the participants believed that they can obtain this treatment directly from their pharmacist while 47% knew that they first had to go to their doctor to obtain a prescription. Sixteen percent (n = 16) of the participants were undecided.

To identify if participants would seek further information regarding this treatment by, for example visiting the website (www.36hours-of-freedom.co.za) provided in the advertisement, Statement 4.7 was posed to them. Only 31% of the participants agreed
that they will visit this website to seek additional information about the treatment while 54% stated that they will not visit such a website.

In the final Statement (Statement 4.8) participants were asked whether they felt that awareness should be created about intimate conditions such as erectile dysfunction. Sixty-seven percent of the participants felt that public awareness should be created, while 26% felt that such intimate conditions should not be publicised in pharmaceutical advertisements.

6.3.6 Conclusion

The results obtained from this survey highlighted the fact that a large number of consumers are exposed to print media, mainly magazines. This increases the probability that the rate of exposure to pharmaceutical advertisements will be high as a large number of consumers read magazines on a weekly basis. It was evident that more young adults are exposed to pharmaceutical advertisements. This is substantiated by the fact that in this study the largest percentage of participants between the ages of 18 years and 30 years appeared to read magazines and newspapers on a weekly basis. No differences regarding the exposure to print media were found between males and females.

Many consumers found pharmaceutical advertisements to be informative and not lacking in any information although consensus was not reached on the degree of difficulty regarding the comprehensibility thereof. It is evident that more than half of the consumers will consult doctors or pharmacists on treatments advertised. However, contrary to these beliefs, the majority of consumers felt that pharmaceutical advertisements can be misleading. An overwhelming number of consumers also felt that slimming advertisements and similar pharmaceutical advertisements could create a false impression raising concern about the pictures of models that appear in these advertisements.

Almost half of the consumers believed that pharmaceutical advertisements are not directed at emotionally vulnerable consumers such as those suffering from chronic
conditions, although more than half of the consumers suffering from chronic conditions felt that this tendency does occur. Many consumers, including those suffering from chronic conditions, were of the opinion that advertisements creating awareness of diseases, or conditions such as erectile dysfunction, did not result in fear amongst consumers.

The majority of consumers found colourful pharmaceutical advertisements attractive and also believed that pictures make such advertisements more interesting. This was evident in the Panado® MedSip advertisement as the majority of consumers were attracted to the bright yellow colour. It can therefore be assumed that consumers’ attention will be easily attracted by pharmaceutical advertisements that have aesthetic appeal.

A result of concern obtained from the Panado® MedSip advertisement was that 48% of the consumers believed that a medicine containing paracetamol can have similar qualities to old traditional remedies that contain food (for example, chicken, honey, lemon, or ginger) as basis. However, in contradiction to this, many consumers believed that it could be potentially dangerous to compare medicines to food in advertisements.

What also raised concern was that 45% of the consumers believed that a treatment such as the one alluded to in the erectile dysfunction awareness advertisement, could improve troubled relationships. Furthermore, 37% of the consumers believed that they could obtain this treatment directly from their pharmacist without having to consult a doctor.

The results obtained from the consumer survey will be used to support the proceeding section, *decoding of pharmaceutical advertisements*.

### 6.4 DECODING PHARMACEUTICAL ADVERTISEMENTS

#### 6.4.1 Introduction

The term *decoding* is simply defined as finding the meaning of something, as in this case, the meaning of pharmaceutical advertisements (Oxford Advanced Learner’s Dictionary,
In semiotic terms, however, Underwood (2003) explained that decoding is the basic recognition and comprehension of what it says and also the interpretation and evaluation of its meaning with reference to the relevant codes.

In this section pharmaceutical advertisements (see Appendices C, D, and E) used in the focus group and consumer survey were decoded to interpret and evaluate each of their meanings by using semiotics as basis. A basic synopsis of each of the three pharmaceutical advertisements was first provided followed by the decoding process. In the decoding process various semiotic aspects discussed in Chapter three were identified. The main concept, the sign of each advertisement, was identified first followed by the signifier and signified. Other concepts identified were denotation and connotation as well as the referent system employed in each of these pharmaceutical advertisements. Various concepts in the decoding advertisement model (see Figure 3.8, Chapter three) were also identified in each advertisement, where applicable. The semiotic concept, ideology, was finally identified to provide an overall meaning to each pharmaceutical advertisement.

Furthermore, the colours that appeared in each advertisement were interpreted on the basis of its psychological and symbolic meanings as discussed in Chapter three (see Table 3.3, Table 3.4, and Table 3.5). Lastly, each advertisement was analysed in terms of its legal and ethical requirements identified in Chapter four. Here, regulations used for this investigation consisted mainly of the Regulations stipulated in the Medicines and Related Substances Act 101 of 1965, as amended (referred to hereafter as the Medicines Act).

The meanings obtained from the semiotic concepts identified, the interpretation of the colours, and the legal and ethical aspects these pharmaceutical advertisements have to adhere to were used to provide a more in-depth understanding thereof. By using the results obtained from the focus group (Section 6.2) and consumer survey (Section 6.3) to support these findings, areas in the three pharmaceutical advertisements where misinterpretation could occur, were identified.
6.4.2 Phytocor®

6.4.2.1 Synopsis

This is a visually attractive advertisement depicting the natural cholesterol lowering agents, Phytocor® and Phytocor® Plus. Four colours were used in this advertisement, namely white, green, blue, and red. Pictorially the advertisement consists of a red heart held by a hand with a fading face at the right hand side of the apex of the heart. The handheld heart is firstly surrounded by a white halo, followed by a green half moon. On the right half of the advertisement a green beam descends from top to bottom. This beam contains the lexical portion of the advertisement and identifies the natural ways of protecting a person’s cardiovascular system. It also identifies which vitamins and minerals are important to ensure a healthy cardiovascular system. These vitamins and minerals form part of the Phytocor® range. On the left side a lexical component can be found that explains the differences between Phytocor® and Phytocor® Plus. At the bottom of the advertisement (the blue area) the pharmaceutical company’s name was revealed. This blue area also identifies the ingredients of Phytocor® and Phytocor® Plus as well as the references to each of the statements made.

6.4.2.2 Semiotic criteria

Table 6.9 identifies the sign, signifier, and signified apparent in this advertisement. Here, the sign can be seen as both symbolic and iconic. As there is a conventional relationship between the signifier and the signified (a heart conventionally illustrated by the basic sign, ♥), the sign can be seen as symbolic. However, since the image of the heart only represents a human heart by convention, the sign can also be seen as iconic as this image is not that of a real human heart (Myers, 1997: 137; Underwood, 2003). Furthermore, the sign denotes a red heart figure embraced by a person’s hand (Underwood, 2003). However, the connotation made to this sign is that the heart is a precious organ that should be protected and cared for, as is depicted by a person’s hand that holds the heart (Cook, 1992: 101).
The focus group participants believed that this red heart results in this advertisement being more attractive. It also attracted the participants’ attention as one said: “that is the first thing they see...the nice picture...”. It was evident that the heart is the main pictorial component in this advertisement as the participants did not refer to the bright colours that appeared.

Similarly, as was identified by Goldman and Montagne (1986), the layout of the Phytocor® advertisement resembles the concept followed by antidepressant advertisements found in 1986. The layout of antidepressant advertisements consisted of three main components, the signifying image, name and image of the package design, and a framing caption. The Phytocor® advertisement makes use of a photograph of a hand holding a heart used within the frame to act as the focus point and can thus be seen as the signifying image. The name and image of the package design is also present in this advertisement. Goldman and Montagne (1986) explained that the final component, a framing caption, connects the meanings of the signifying image to the brand. In addition to this advertisement’s heading, “protect your heart”, the entire lexical component of the advertisement connects the meaning of the image to the brand advertised. Here, the heading and the other lexical component appearing in the green beam, supplements the signifying image by explaining how people can protect their hearts – by means of Phytocor® or Phytocor® Plus.

It is difficult to identify a referent system in this advertisement. However, an assumption can be made that time can be a referent system (Williamson, 2005: 152). It can be argued

<table>
<thead>
<tr>
<th>Sign</th>
<th>The image of the heart can be seen as the sign.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Signifier</td>
<td>The image signifies a representation of a heart held by a person’s hand.</td>
</tr>
<tr>
<td>Signified</td>
<td>The importance of protecting and caring for the human heart can be seen as the signified.</td>
</tr>
</tbody>
</table>

(Adapted from: Chandler, 2005b)
that if a person does not protect his or her heart now, the future may look bleak for his or her heart and health in general. Another point of view is that nature can also be involved and can therefore also be the referent system, back to nature (Williamson, 2005: 123). Although not pictorially illustrated, the concept of nature is explained in the lexical components by referring to the alternative treatment for high cholesterol as well as referring to the Phytocor® range as a natural dietary supplement. This product range is claimed to be natural due to its active ingredient, policosanol, and other ingredients such as freeze dried omega 3 fatty acids, folic acid, zinc, and B vitamins.

Two factors that were identified in the decoding advertisement model (see Figure 3.8, Chapter three) played a role in these two possible referent systems identified in this advertisement, namely appellation and desire. With appellation the consumer can place himself or herself in the position of wanting (desire) to protect and look after his or her heart (Williamson, 2005: 40). This will ensure that the advertisement has a meaning to the consumer. The need to protect your heart is a desire a consumer will have (Creating meaning and images, 2002).

These two factors help to shape the consumer’s ideology towards this advertisement. The assumption can thus be made that if a consumer uses this natural dietary supplement, in conjunction with the lifestyle choices provided in the advertisement, his or her heart will be protected.

6.4.2.3 Colour interpretation

Although little was discussed by the focus group about colour in this advertisement, four colours played a role in this advertisement, namely white, green, red, and blue. White is seen as a bright colour that creates a sense of space in this advertisement. This colour also has the ability to advertise the highlights of the advertisement, in this case the highlight being the image of the heart (Wells, et al., 1995: 474; Wright, 2006). Furthermore, white is associated with goodness and purity, thereby reinforcing the fact that this dietary supplement is natural (Van Wagner, 2006). As white is seen as a colour of safety in medicinal products, in this advertisement it may allude to the fact that
lifestyle choices such as these natural dietary supplements will assist to safely protect a person’s heart (Wright, 2006). However, most importantly, white is associated with low weight, low-fat food that accentuates the lifestyle choices mentioned in the lexical portion in the green beam, “eating a healthy diet...to protect our hearts” (Van Wagner, 2006).

The green colour in this advertisement brings the element of nature to this advertisement as this colour is associated with nature (Van Wagner, 2006). Therefore, with the use of this green colour it becomes apparent that the referent system applied in this advertisement may indeed be that of back to nature. Green also symbolises freshness, a natural characteristic of these supplements, and health, a characteristic that is needed to protect a human heart (Van Wagner, 2006). This colour also has, as with white, a strong emotional correspondence with safety (Wright, 2006). Therefore, green and white reinforces the fact that these natural dietary supplements provided, safely protects the heart. It can also be speculated that this can be the reason why the green colour appears as a half moon surrounding the left apex of the heart. Green is also thought of as having healing powers that can be linked to the Phytocor® range which has the ‘power’ to protect a person’s heart (Hoyer & MacInnes, 2001: 92).

The colour red only appears in limited areas in this advertisement but plays a major role in providing meaning to this advertisement. It appears in four areas in this advertisement, the word “your” in the heading, the heart, the top half of the products’ packaging, and the products’ names at the bottom. Red is a warm, intense colour which can illustrate the physiological nature of the human heart. This is also a bright colour that highlights the crux of this advertisement (Wells, et al., 1995: 474; Wright, 2006). By linking all the red components in the advertisement, a sales formula can be formulated:

\[
your + \heartsuit = \text{Phytocor® and Phytocor® Plus}
\]

The answer to this formula, Phytocor® and Phytocor® Plus, is illustrated pictorially, by means of the boxes appearing in the green beam, and also in writing appearing in the
bottom white portion above the blue portion. This sales formula can be interpreted as ‘your heart needs Phytocor® or Phytocor® Plus’ to be healthy.

Red is also a colour that refers to danger (Van Wagner, 2006). Here, the danger can be due to not protecting your heart which can result in heart diseases as is stated in the first paragraph in the green beam, “protect against cardiovascular disease”. Another danger that red is associated with is the ability to increase blood pressure, an abnormality that has a dangerous impact on the heart (Nolan, 2003). In accordance with this advertisement, lifestyle changes and the Phytocor® range of supplements can protect a person’s heart against these dangers.

The other colour that appears in three places in this advertisement is blue. It appears in the words “protect” and “heart” in the heading, the bottom of the products’ packaging, as well as the bottom of the advertisement. The blue words appearing in the heading, “protect” and “heart”, can also be formulated into a sales formula:

\[
\text{protect} + \text{heart} = \text{Phytocor® by Pharma Dynamics}
\]

Here, the answer appears pictorially (the bottom blue portion of the products’ packaging contains the name, Phytocor®) while the pharmaceutical company’s name appears in the blue portion at the bottom of the page. This sales formula can be interpreted as ‘you can protect your heart with Phytocor® that is manufactured by Pharma Dynamics’.

These sales formulas, or “punch lines” as referred to by the focus group participants, were seen as tools to attract vulnerable consumers. One participant pointed out, “something that you get in each of these ads is the punch line, ‘Protect your heart’, and someone who has heart trouble, that’s the first thing they see...and then it hits home”.

Blue is also a cool, masculine colour which is often the colour of choice in men (Hoyer & MacInnes, 2001: 92; Van Wagner, 2006). However, in the context of this advertisement, it may be speculated that the colour blue is used to underline the fact that cardiovascular diseases are more associated with males than females and thus maybe more directed
towards men. Blue also symbolises trust, confidence, faith, and loyalty, characteristics important to the pharmaceutical company (Van Wagner, 2006). They want consumers to trust, be confident, and have faith in their range of supplements. The pharmaceutical company is also seeking for brand loyalty.

The colour blue is also believed to have a calming effect on the body and is thought to have the ability to lower a person’s pulse rate (Van Wagner, 2006). These factors are vital in protecting the heart.

6.4.2.4 Legal and ethical criteria

As this advertisement is of a natural dietary supplement and not of a medicine, the legal requirements (in accordance with Regulation 45(4) of the Medicines Act regarding the advertising of medicines) to which print advertisements of medicines must adhere to do not apply. In guidelines provided for the advertising of OTC medicines by the Self-Medication Manufacturers’ Association of SA, there were referred to certain claims that may not be made in natural products such as the Phytocor® range. The claims regarding natural products that should not be made in print advertisements are (ASA, 2004):

- “No suggestions should be made claiming that a product’s safety or efficacy is due to the fact that it is natural, unless such claims can be substantiated by clinically proven results.
- No claim should state that a product is natural unless all its ingredients are naturally occurring, also including herbal products where all its active ingredients must be that of plants or extracts of plants.”

No claims regarding this supplement’s safety, as a result of it being natural, were made. All claims regarding its effectiveness were substantiated by clinically proven results. References to these claims were stated in the fine print appearing in the blue portion at the bottom of the advertisement. Regarding the second claim stated in Figure 6.10, all the ingredients in the Phytocor® range occur naturally. Therefore, claims can be made that the Phytocor® range of supplements are natural.

Two ethical issues were, however, identified in this advertisement. The first ethical issue was identified in the last paragraph above the pictures of the products’ packaging in the
green beam. This deals with the word “optimal” in the sentence “...an optimal formulation...”. In this sentence it seems that this word is used in similar fashion than superlative words such as “the best”. According to the Oxford Advanced Learner’s Dictionary (1989: 869) optimal can be defined as “best or most favourable”. The sentence can thus be read as ‘the best (or most favourable) formulation...’. In accordance with the Marketing Code, such a claim is prohibited as there are too many variables to prove such a claim (Code of Practice, 2004).

Another ethical issue that can be misinterpreted by consumers appeared in the last paragraph on the left side of the advertisement below the image of the heart. In the statement “Phytocor® is available without a prescription, from pharmacies and selected health shops”, it is unclear if a prescription is needed to obtain Phytocor® Plus as this forms part of the natural supplement range provided to lower cholesterol. This creates the impression that only Phytocor® can be obtained without a prescription.

What is positive to see in this advertisement is that this pharmaceutical company does not only encourage their product to be used but also informs the consumers about additional lifestyle choices that can be made, for example, “...not smoking, eating a healthy diet, and exercise...”. These examples can assist a person in protecting his or her heart.

6.4.3 Panado® MedSip

6.4.3.1 Synopsis

The Panado® MedSip advertisement is a bright yellow pharmaceutical advertisement with red writing and a white medicine box. Panado® MedSip is a medicinal drink consisting of the active ingredient, paracetamol. It is indicated for “the symptoms of colds and flu” such as “pain and fever”. The product is available in two flavours, honey-lemon and ginger and is claimed to contain vitamin C. It claims to be tartrazine-free and gives the impression that it is directed at children as the advertisement states “moms choose Panado”. Furthermore, the advertisement gives the impression that it is a ‘natural’ product due to the illustration of the lemon, ginger, and honey in front of the product.
However, the main theme of the advertisement seems to be the connotation of Panado® MedSip to chicken soup with the sentences, “Just like chicken soup, only without the chicken. And it’s not soup”. On the right-hand edge of the advertisement, the company also advertise the Panado® product range available to consumers.

### 6.4.3.2 Semiotic criteria

Table 6.10 highlights the sign and its two components, the signifier and signified, identified in this advertisement. The sign can furthermore be seen as an iconic sign as the product illustrated is not real and is represented only in an advertisement (Myers, 1997: 137; Underwood, 2003). It denotes that this medicinal product represents a medicine that can be dissolved in water to form a medicinal drink (Underwood, 2003). The connotation to this sign is that this medicinal drink is safe and can be effectively used to treat pain and fever in both children and adults (Cook, 1992: 101). This connotation comes from years of Panado® advertisements where phrases such as “GP’s choice” are well-known by consumers.

**Table 6.10  Identification of the sign, the signifier, and signified in the Panado® MedSip advertisement**

<table>
<thead>
<tr>
<th>Sign</th>
<th>The illustration of Panado® MedSip can be deemed the sign of this advertisement.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Signifier</td>
<td>The box of Panado® MedSip with the medicinal sachets inside can be deemed the signifier.</td>
</tr>
<tr>
<td>Signified</td>
<td>The signified can be seen as the representation of a medicinal drink that can make you feel better when you have symptoms of cold or flu.</td>
</tr>
</tbody>
</table>

(Adapted from: Chandler, 2005b)

However, the connotation to Panado® MedSip as being safe and effective, is indirectly achieved by means of the referent system, cooking nature and the wording at the top of the advertisement, “Just like chicken soup...”. Judith Williamson’s (2005:103) theories state that advertisements “cook” nature by illustrating the transference of raw materials
into the final product. In this advertisement it is illustrated with the raw, natural products (lemon, ginger, and honey) being transferred to the final product, Panado® MedSip.

Although the pharmaceutical company manufacturing this medicine may argue that the pictorial representation of the honey, lemon, and ginger identifies the two flavours this product is available in, the results obtained from the focus group indicated that this representation can mislead consumers into thinking that this is a natural product. One of the participants in the focus group indicated that these natural ingredients are a popular combination in old traditional remedies used for the treatment of colds and flu. This participant therefore misinterpreted the illustration by thinking that these are the ingredients of Panado® MedSip, although it only indicates the two flavours available. Forty nine percent of the consumers that participated in the consumer survey also believed that Panado® MedSip has similar qualities to the old traditional remedies referred to in the advertisement. Only 35% of the consumers thought that such a connotation cannot be made. Many of the participants in the focus group believed that consumers will be attracted to this product as many like to use old traditional remedies.

The wording at the top of the advertisement also reinforces the connotation. By interpreting these two sentences, it can be assumed that the reference made to chicken soup merely reinforces the fact that Panado® MedSip represents the same traditional qualities. Chicken soup is seen as an old traditional remedy for colds and flu. Both these referent systems reinforce the fact that Panado® MedSip is a safe and effective treatment for colds and flu. Sixty-eight percent of the consumers in the consumer survey, however, believed that it is dangerous to compare medicines to food in advertisements. This was echoed by one of the focus group participant who pointed out that food does not hold a danger when consumed but that paracetamol, the active ingredient in Panado® MedSip, can be potentially dangerous when not used accordingly.

Finally, it can be assumed that the ideology (the assumption made) of this advertisement is that Panado® MedSip is a medicinal drink that shares the same qualities (safety and efficacy) as chicken soup and the naturally occurring lemon, honey, and ginger.
6.4.3.3 Colour interpretation

There are three prominent colours in the Panado® MedSip advertisement, yellow, white, and red. Two of these colours, yellow and red, are warm colours or hues. Each colour represents different meanings that support the message of the advertisement.

The yellow colour is a bright colour that attracts a person’s attention immediately (Nolan, 2003; Van Wagner, 2006). It is associated with joy, happiness, and energy, all attributes which can illustrate good health (Van Wagner, 2006). Good health is what the Panado® range of medicines, including Panado® MedSip, strives for. Yellow is a visible colour that is often employed for its attention getting attributes (Wells, et al., 1995: 474). This colour is therefore employed to increase visibility, especially as it was found in a well-known magazine where advertisements have to be more visible. In the focus group participants felt that colour used in pharmaceutical advertisements do attract the attention of consumers. One of these participants described this yellow colour as “eye catching”. This was reinforced by the fact that 71% of the consumers in the consumer survey were in favour of the yellow colour used in this advertisement.

Although it seems that yellow is the main attention getting attribute of this advertisement, the Panado® MedSip box with its white colour also draws attention. This can also be seen as a reason for choosing yellow as background colour. White also highlights the Panado® MedSip box (Wells, et al, 1995: 474; Wright, 2006). This colour is associated with goodness, again underlining the fact that the Panado® range of medicines strives to be a good medicine in terms of safety and efficacy (Van Wagner, 2006). The goodness is reinforced by comparing the qualities of chicken soup and the natural ingredients of lemon, honey, and ginger to Panado® MedSip. Furthermore, the use of white suggests safety (Wright, 2006). This complements the concept of safety talked about at the bottom halve of the advertisement (“For a safe, effective remedy from pain and fever...”).

All the wording in this advertisement is in red. Red is a bright and intense colour which, as in this advertisement, is used as an accent colour (Wells, et al., 1995: 474). The red wording thereby emphasises the important facts about Panado® MedSip. It can be
assumed that the chicken soup concept is the main idea of the advertisement as it appears in bold, large red letters. It emphasises the fact that Panado® MedSip stands for the same qualities as the *goodness* of chicken soup. Red is also associated with energy and strength, which again reinforces the attributes evident in a healthy person and which can be attained from Panado® MedSip (Van Wagner, 2006).

This colour also evokes an emotion of love, in this advertisement, the love of a mother for her child (Van Wagner, 2006). A mother will therefore show her love by using a “*safe, effective remedy*” for the “*symptoms of colds and flu*”. If a mother loves her child she will use Panado® MedSip. One of the female focus group participants also believed that the emotion of love does play a role in this advertisement and stated that the phrase, “*For a safe, effective remedy from pain and fever, moms choose Panado®*”, is aimed at the emotion of mothers. She also said: “…*In order to be a good mom you need to give your child this*” and “…*Well, am I a good mother if I don’t give my child this?*”.

It is also evident is that the brand name, Panado®, is in the boldest red font. This clearly shows that Panado® is the only brand that emphasises good health.

### 6.4.3.4 Legal and ethical criteria

The Panado® MedSip advertisement does comply with the legal requirements to which pharmaceutical advertisements in print form must adhere to. In accordance with Regulation 45(2)(a) of the Medicines Act regarding the advertising of medicines, this medicine may be advertised to the general public as it is a medicine that contains a Schedule 0 substance (Pharmaceutical Society of South Africa Law Compendium, 2005: MRE – 50). The “S0” (Schedule 0) sign can be seen in red next to the brand name on the white box.

This print advertisement also contains all the requirements stated by Regulation 45(4), Subsections (a), (b), and (c), to which such advertisements have to adhere to (Pharmaceutical Society of South Africa Law Compendium, 2005: MRE – 51).
Panado® MedSip advertisement does state the proprietary name and approved name as well as the quantity of its active ingredient (500 mg paracetamol).

Although this advertisement adheres to the legal standards, ethically there were various arguments. The Self-Medication Association of SA provided guidelines regarding OTC medicines. The following three claims stipulated in these guidelines can be used as arguments in this advertisement (ASA, 2004):

- “Suggestion should be made that OTC products are medicines and not foodstuff, cosmetics, or any other type of non-medical product.
- No misleading statements dealing with the nature, ingredients, or indications of such products should be made.
- No suggestions should be made claiming that a product’s safety or efficacy is due to the fact that it is natural, unless such claims can be substantiated by clinically proven results.”

At first glance this Panado® MedSip advertisement does not appear to be an advertisement for a medicinal product but rather a natural product. This is due to the depiction of lemon, honey, and ginger in front of the medicine box. As was alluded to by the results obtained in the focus group and consumer survey, these depictions may mislead consumers into thinking that Panado® MedSip contains natural ingredients such as honey, lemon, and ginger. The honey, lemon, and ginger with the chicken soup phrase may also cause consumers to think that Panado® MedSip is safe and effective.

6.4.4 Erectile dysfunction awareness

6.4.4.1 Synopsis

This pharmaceutical advertisement can be categorised as a disease awareness advertisement, although erectile dysfunction cannot be classified as a disease per say but rather a condition. The advertisement creates the impression of awareness amongst consumers about the sexual condition, erectile dysfunction. It consists of a pictorial component, in the form of a photograph that depicts a seemingly loving and happy couple. The pictorial component is complemented by a lexical component describing the negative impact erectile dysfunction has on couples. An unknown treatment alluded to is
advertised as the answer to this problem and consumers are informed that they can ask their doctor or pharmacist for more information about it. This campaign is also known for controversial statements such as “36- hours of freedom”.

6.4.4.2 Semiotic criteria

In Table 6.11 the sign, signifier, and signified of this advertisement are identified. The sign *denotes* a couple that is in a relationship (Underwood, 2003). It *connotes* a loving relationship with passion, love, and intimacy (Cook, 1992: 101). The sign identified can furthermore be classified as a *symbolic sign* due to the fact that the relationship between the signifier and the signified is purely conventional or even culturally specific (Myers, 1997: 137; Underwood, 2003). This relationship is conventional and cultural as it is generally accepted that the couple depicted in the photograph will engage in sexual intimacy.

<table>
<thead>
<tr>
<th>Sign</th>
<th>The image of the happy couple on the left hand side can be regarded as the <em>sign</em> of this advertisement. It is seen as the sign as it represents an image that has meaning attached to it.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Signifier</td>
<td>The signifier is the form which the sign (the image) takes. The <em>signifier</em> can be seen as the actual colour photograph seen in this advertisement as it is the form the image (sign) takes.</td>
</tr>
<tr>
<td>Signified</td>
<td>The <em>signified</em> represents the concept that the image signifies a couple that radiates love and happiness, traits present in a successful relationship.</td>
</tr>
</tbody>
</table>

(Adapted from: Chandler, 2005b)

The referent system that plays a role in this advertisement, as was identified in Panado® MedSip, is *cooking nature*. Here, however, as was stated by Williamson (2005: 120), the referent system refers to “*cooked sex*”. In this sense, ‘cooking nature’ involves people
and their passion for each other. Thus, sex becomes a referent system which is symbolically represented by the sign (the image of the happy couple).

Three of the five factors, identified in the decoding advertisement model (see Figure 3.8), appellation, mirror-phase, and desire, played a role in the development of this referent system. These factors came into effect as result of the sign. With respect to this advertisement, appellation is when the consumer is forced to put himself, or herself, in place of the happy couple depicted in the photograph (Williamson, 2005: 40). By doing so, the consumer gives meaning to this advertisement.

The mirror-phase, however, refers to the consumer’s ability to wish for (desire) what is portrayed in the photograph (Williamson, 2005: 61). Consumers acknowledge that they do have a problem (they have erectile dysfunction). By looking at and reading the advertisement, they realise that there is a treatment available that can help to satisfy their desire of having a relationship that radiates the same type of love and happiness as portrayed. These three factors identified the emotional effect this advertisement may have on males suffering from erectile dysfunction.

It was evident from the results obtained in the focus group that advertisements, such as this advertisement, target emotionally laden consumers suffering from conditions like these. This was reflected by one of the participant’s words “...this ad hits the emotions...To someone who’s desperate to fix their marriage or something, this is the only solution”. One participant described this form of advertising as “unprofessional pressure” whereby another said “...it’s kind ‘a cruel in a way”. Of concern, however, was that 45% of the consumers in the consumer survey believed that the treatment alluded to can provide a marriage or relationship with the same qualities portrayed by the photograph.

A similar approach to one of Jean-Marie Floch’s (2001: 79) 12 visual characteristics, layout in conjunction versus layout in disjunction, was followed in encoding this advertisement. As with the example of the functional and dysfunctional family used by Floch to illustrate this visual characteristic, the paragraph of words (the lexical
component) in the awareness advertisement explained the negative aspects of erectile dysfunction whereas the photograph (the pictorial component) illustrates what a “functional” relationship should look like.

A unique aspect of this advertisement is the swoosh of the treatment’s logo (see the lower right hand corner) that is incorporated into the photograph. In the photograph it seems to be a transparent whitish colour and not the green and yellow colour seen in the logo. This seems to symbolise that the pharmaceutical company’s treatment ensures that couples are happy. This idea is reinforced by the sentence “Brought to you by Lilly in the interest of healthy relationships”.

This view was also echoed by the focus group participants. One participant said, “…it also tries to make the company look good…They try to come across by saying [sarcastic voice]: ‘We care for you. We don’t want to make money, we care for you’… So, kind ‘a sucking up to customers”.

6.4.4.3 Colour interpretation

Colour does not play a major role in bringing the advertisement’s message across to consumers. Areas in the advertisement where colours were employed are the photograph, the main slogan “THINK PASSION NOT PRESSURE”, the treatment’s logo, and the pharmaceutical company’s name at the bottom right hand corner.

The colours used in the photograph seem to make it more attractive and accent its role as signifier in the advertisement. Green, red, and yellow colours are present in the rest of the advertisement. The main slogan consists of the same green colour present in the treatment’s logo which can again be speculated as reinforcing the idea that their treatment is responsible for reigniting the passion in a couple’s relationship.

Green is a cool colour or hue which is a colour of nature (Van Wagner, 2006). This reinforces Williamson’s (2005: 120) concept that sex is part of human nature. It also symbolises growth, harmony, health, and fertility (Nolan, 2003; Van Wagner, 2006;
These traits are necessary for and should be present in a healthy relationship. This advertised treatment claims to restore these traits in a relationship where such traits were lacking as a result of erectile dysfunction. Green is also thought of as having healing powers. Although it is highly unlikely that males can be ‘healed’ from erectile dysfunction, this treatment is advertised as solution to such problems relationships maybe faced with. Green is also found to be the most restful colour on the eyes and is therefore thought to improve vision (Hoyer & MacInnes, 2001: 92). This can also be one of the reason for using the green colour in the main slogan – to accentuate the message that there should not be pressure in a loving relationship but rather passion, a trait that this treatment can provide.

The logo of the treatment consists of yellow and green. As with the Panado® MedSip advertisement, the yellow colour is a bright, warm colour or hue (Van Wagner, 2006; Wells, et al., 1995: 474). In this case this colour is associated with joy and happiness as well as having attention-getting attributes (Van Wagner, 2006). Joy and happiness are also traits that are important to a good relationship.

The pharmaceutical company’s name appears in red at the bottom of the right hand corner of the advertisement. It is a bright, warm colour or hue used as an accent colour to stimulate consumers into making quick decisions (Wells, et al., 1995: 474; Wright, 2006). Here, the quick decision can be for consumers to recall the pharmaceutical company’s name. The red colour is also thought to evoke erotic feelings which can be expected when passion occurs (Van Wagner, 2006).

6.4.4.4 Legal and ethical criteria

There are no exact regulations regarding disease awareness advertising in SA, other than the regulations for the advertising of medicines found in the Medicines Act. However, this advertisement raised various ethical concerns.

The unnamed treatment alluded to in this awareness advertisement is of a well-known medication with Schedule 4 status and, in accordance with Regulation 45(2)(b) regarding
the advertising of medicines in the Medicines Act, may not be advertised to the general public in any manner whatsoever (Pharmaceutical Society of South Africa Pharmacy Law Compendium: MRE – 50). However, a website address and telephone number are provided to consumers to obtain more information. Upon further investigation, the website address provided (www.36hours-of-freedom.co.za), was investigated to see if the medication is named on this website. No medication name was stated on this website.

Although it may be the case that this advertisement stays within the legal boundaries, questions do arise about the techniques used to overcome this legal drawback. This advertisement can be seen as an indirect form of direct-to-consumer advertising which involves the use of advertising techniques such as word-of-mouth. In this case, the doctor or pharmacist acts as the advertiser for the pharmaceutical company. It is thus the doctor or pharmacist that informs the public about the Schedule 4 treatment, thereby overcoming the limitation of Regulation 45(2)(b).

By reading this advertisement a person gets the sense that erectile dysfunction, and the medication available to treat it, is the sole answer for troubled relationships. Furthermore, one gets the sense that the pharmaceutical company is an expert on relationships and the emotional burden this condition places on a relationship. This is visually reinforced by the ‘swoosh’ of the treatment’s logo that embraces the loving couple in the photograph, the words in the last sentence of the paragraph, “the treatment that allows you and your partner the freedom to get close again”, and the phrase at the end, “Brought to you by Lilly in the interest of healthy relationships”.

Another issue that caused international controversy among the medical fraternity and advertising watchdogs is the well marketed phrase “36-hours of freedom”. This is clearly a misleading and deceptive claim made by the pharmaceutical company. Although this distasteful claim is pharmacologically sound and understood by healthcare professionals, consumers can misinterpret this claim in various ways.

One other statement made, “ask your doctor or pharmacist”, can mislead consumers into thinking that the treatment can be directly obtained from the pharmacist. It is nowhere
stated that the treatment has a Schedule 4 status and could only be obtained by means of a prescription. This issue was also discussed by the focus group where one of the participants raised concern and said “…the doctor part I can understand but the pharmacist part…coz the pharmacist can’t prescribe...the patient is gonna say: ‘No, no but it says so! Why can’t you give me?’…” This participant was of the opinion that the wording “ask your doctor or pharmacist” in this advertisement can aggravate consumers, especially if they cannot get this treatment directly from their pharmacists. Only 47% of the consumers in the consumer survey were aware that they cannot get this treatment directly from the pharmacist without a prescription.

6.4.5 Conclusion

From these results, it is evident that by decoding these pharmaceutical advertisements it was possible to identify the intended meaning of each and also determine whether there were any areas in which misinterpretation can occur. In each of the three pharmaceutical advertisements areas were identified where misinterpretation can occur. In the Phytocor® advertisement it was determined that consumers will not be sure if they need a prescription for the Phytocor® Plus product as the advertisement only states that Phytocor® can be obtained without a prescription.

Two aspects of the Panado® MedSip advertisement were found to be misleading. The first aspect was that consumers may interpret this medicine advertised as one for a natural product due to the pictorial representation of the lemon, honey, and ginger. This, however, only identifies the flavours this product is available in, honey-lemon and ginger. The second misinterpretation that can occur is that consumers can interpret Panado® MedSip as a safe medicine due to the comparison with chicken soup and the natural products. Panado® MedSip, however, contains the active ingredient, paracetamol, which can be dangerous if not used as recommended. These concerns were also raised in the focus group and were also evident in the consumer survey.

Various ethical issues that were raised in the erectile dysfunction advertisement can result in misinterpretation. This pharmaceutical advertisement created the impression that the
treatment can restore broken relationships apparently caused by erectile dysfunction. The phrase, *36-hours of freedom*, appearing on the website address can be misleading and misinterpreted by consumers in various ways.

The final ethical issue that raises concern in this awareness advertisement dealt with the phrase “...ask your doctor or pharmacist...”. Consumers may misinterpret this phrase by thinking that this treatment can be obtained directly from the pharmacist. As this is a treatment that contains a substance of Schedule 4 status, it can only be obtained by means of a doctor’s prescription.

An in-depth discussion of the results obtained from these sections, as well as the investigation of the legislation pertinent to pharmaceutical advertisements in Chapter four, is presented in Chapter seven.
CHAPTER 7
DISCUSSION AND CONCLUSION

7.1 INTRODUCTION

The primary aim of this study was to identify how consumers perceive pharmaceutical advertisements. Five more specific objectives (see Section 1.3) were developed to achieve this aim. The five specific objectives can be categorised into three main categories, namely legal and ethical considerations in pharmaceutical advertising in SA, the interpretation of pharmaceutical advertisements, and the problematic areas in pharmaceutical advertisements found in SA.

The main category, legal and ethical considerations in pharmaceutical advertising in SA, was investigated by achieving three of the five specific objectives. This legal and ethical investigation formed part of Chapter four (see Section 4.5). The empirical part of the study was used to identify consumers’ interpretation of pharmaceutical advertisements. All of the above activities were used to identify any problematic areas that may exist in pharmaceutical advertisements.

7.2 PERCEPTIONS TOWARDS PHARMACEUTICAL ADVERTISEMENTS IN SOUTH AFRICA

The literature study and results obtained from the consumer survey indicate that consumers will be exposed to a considerable number of pharmaceutical advertisements in print form. It was also evident that more pharmaceutical advertisements will be found in magazines than any other form of print media. Brewer (1998: 208) and Wells and colleagues (1995: 353) stated that magazines have a much longer lifespan, has increased consumer exposure, and also a high read potential as consumers usually share their magazine with friends and family. These advantages cause magazines to be an excellent print medium to advertise pharmaceutical advertisements. Another advantage is that
most magazines circulate nationally which leads to an even greater exposure to pharmaceutical advertisements (Brewer, 1998: 208).

The All Media and Products Survey (AMPS®) conducted by the SA Advertising Research Foundation (SAARF) identified that, between July 2002 and June 2003, 40.7% of the SA adult population read magazines and that they read an average of 3.19 magazine titles within this period (South African Advertising Research Foundation, 2007). The consumer survey conducted for this study indicated that 63% of the consumers read magazines on a weekly basis. These statistics reinforce the fact that a high number of consumers read magazines thus increasing the likelihood that they will be exposed to pharmaceutical advertisements.

It was also evident from the literature that there are two major factors used to effect consumers’ perceptions towards advertisements. These two factors are persuasion and emotions. As was proven in this study, persuasion and emotions are often employed in pharmaceutical advertisements.

How consumers interpret pharmaceutical advertisements hinge on their perceptions towards such advertisements. Perception is an internal psychological process that forms part of the consumer’s decision-making process of purchasing a product or a service (Belch & Belch, 2004: 105). The process of perception involves how consumers sense the information in pharmaceutical advertisements, how they attend to this information, and ultimately how they interpret and give meaning to such information (Belch & Belch, 2004: 105).

Clow and Baack (2005: 120) stated that the common goal of an advertisement is to persuade. Therefore, the assumption can be made that pharmaceutical advertisements are a persuasive form of communication. As a result, pharmaceutical companies influence and convince consumers to buy their products. Tellis (2004: 12) also stated that, because of this persuasive nature, advertisements have the capacity to change consumers’ opinions, behaviour, and attitudes.
The Elaboration Likelihood Model can be used to determine the route of persuasion followed when interpreting pharmaceutical advertisements (Belch & Belch, 2004: 159; Tellis, 2004: 113; Vidal, 1998). A central route is followed when consumers are able to process information obtained from advertisements. However, when consumers are unable to process information obtained in advertisements, a peripheral route is followed. In this route responsive cues are incorporated into the advertisement to reinforce the message of the advertisement. Responsive cues such as the structure of the advertisement, the number of arguments included, and imagery are incorporated into such advertisements. These are seen as positive cues which have the task of persuading consumers to form a positive attitude towards the brand of the product (Belch & Belch, 2004: 159; Tellis, 2004: 113; Vidal, 1998).

Considering the results obtained from the consumer survey, it is evident that a considerable number, 43% of the consumers, felt that pharmaceutical advertisements are difficult to understand. It can be argued that these consumers will then follow the peripheral route of processing information obtained from pharmaceutical advertisements. These consumers will therefore react towards the positive cues incorporated into the pharmaceutical advertisements to form an understanding of the message provided. Therefore, if consumers are unable to fully interpret pharmaceutical advertisements, they will react to these positive cues to form a meaning.

Wells and colleagues (1989: 20) furthermore stated that persuasion is also concerned with emotions. Raven (2004:9) went one step further and proved that emotion plays a role. Tellis’s (2004: 148) findings supported Raven’s study as he also determined that emotion plays a role in advertising. He determined that when consumers react to stimuli in advertisements, they will take action by one of three modes of persuasion by emotion, namely the associative mode, implicit mode, and the explicit mode.

The two major factors playing a role in shaping consumers’ perceptions towards advertisements, persuasion and emotions, also play a role in the pharmaceutical advertisements selected for the focus group and consumer survey. These factors, together with various other concepts identified in the literature, are incorporated into these
advertisements to change the attitudes, opinions and behaviour of consumers towards these pharmaceutical products.

The proceeding sections will identify how such factors are incorporated in each of the three pharmaceutical advertisements selected.

7.2.1 Phytocor®

In the Phytocor® advertisement discussed in the focus group, a red heart, various bright colours, and arguments are used as positive cues. The heart (pictorially and lexically illustrated), in support with the blue and the red colour, formed two important sales messages, *your heart needs Phytocor® and Phytocor® Plus to be healthy* and *you can protect your heart with Phytocor® that is manufactured by Pharma Dynamics*. Various arguments were used in the advertisement to reinforce these sales messages.

Raven (2004) identified in her study that emotion can also be employed in pharmaceutical advertisements. She identified five powerful emotional factors employed in DTC advertisements (Raven, 2004). In the Phytocor® advertisement two of these emotional factors can be identified, namely the *value of health* and *fear of disability and death*. Here, by means of the picture of the red heart, awareness of the value of a person’s heart is created. The advertisement also informs consumers of the lifestyle choices necessary to protect their hearts. It can be speculated that it aims to warn consumers that, by not following a healthy lifestyle, they can die.

In this advertisement the *associative mode of persuasion by emotion* plays a role (Tellis, 2004: 148). This mode is a method in which emotions are aroused by means of stimuli which are tangentially related to the product advertised. Here, the pictorial representation of the red heart creates an emotional appeal. Consumers will therefore associate the company’s name and this brand with the specific emotion created by the red heart.

Furthermore, in accordance with Maslow’s Hierarchy of Needs, these positive cues can be also seen as motivational cues to persuade consumers that this dietary supplement will
satisfy a *physiological need* and a *need for safety*. This dietary supplement offers to protect consumers’ hearts, thereby satisfying their need for good health as well as satisfying their physiological need for survival (Belch & Belch, 2004:109; De Beer, *et al.*, 1998: 214).

Other than persuading consumers that they should use the Phytocor® range of supplements in conjunction with a healthy lifestyle to protect their hearts, these positive cues should not lead to any possibility of misinterpretation.

### 7.2.2 Panado® MedSip

In the Panado® MedSip advertisement various imagery were incorporated, namely colour, the theme of being *natural*, as well as the argument that this medicinal drink has the same qualities as chicken soup. Although 64% of the consumers disliked the phrase “*Just like chicken soup*”, 71% of the consumers were attracted by the bright yellow colour of the advertisement. As was found in the interpretation of the colour yellow, and as this advertisement was found in a magazine, it becomes more apparent that this colour was chosen to attract attention between all the other advertisements. This advertisement is of high quality and is also colourful, qualities present in magazines as stated by Brewer (1998: 208) and Wells and colleagues (1995: 353).

Through the decoding process it was possible to identify that the referent system, *cooking nature* was used in this advertisement. This referent system is pictorially represented by the honey, lemon, and ginger in front of the Panado® Medsip package. Hence, there is the possibility that consumers could misinterpret this referent system by thinking that this medicinal drink is natural and has all the qualities of honey, lemon, and ginger.

Results from the consumer survey support this possibility. Forty-nine percent of the consumers believed that Panado® MedSip has the same qualities as the traditional colds and flu remedies portrayed pictorially by the honey, lemon, and ginger and lexically by the comparison with chicken soup. With this belief of having similar qualities as naturally occurring substances, the assumption can also be made that it is safe. However,
this can be seen as a dangerous misinterpretation as this product contains paracetamol and should by no means be treated as being as safe as the natural products portrayed. Sixty-eight percent of the respondents in the consumer survey shared this same argument and believed that it can have dangerous consequences when medicines are compared to food in the mass media. This belief was also shared by one of the participants in the focus group.

The emotional factor identified by Raven (2004: 9), responsibility of a person to take care of his or her own health and that of their loved ones, plays a role in this advertisement. Here, the mother may feel emotionally responsible for the welfare of her child and, if the child has cold or flu symptoms, she should give him or her Panado® MedSip. By awakening a mother’s responsibility towards her children, it is evident that the associative mode of persuasion by emotion is applied in this advertisement (Tellis, 2004: 149).

Positive cues are also used as motivation for consumers to buy a “safe” and “effective” remedy for the symptoms of colds and flu. In accordance with Maslow’s Hierarchy of Needs, this form of motivation can be seen as offering a remedy that can satisfy the need for safety, in this case, the need for good health (Belch & Belch, 2004:109; De Beer, et al., 1998: 214).

7.2.3 Erectile dysfunction awareness

The focus group participants felt that the photograph in the advertisement creates the impression that the treatment offers to fix a troubled relationship or marriage. The semiotic criterion, the mirror-phase, employed by Williamson (2005: 60) to decode advertisements, reinforces these findings by identifying that consumers will desire the same love and happiness as portrayed by the photograph. It was evident from the consumer survey that this photograph achieved its purpose as 45% of the consumers believed that this treatment has the ability to improve a troubled relationship or marriage.
One of the emotional factors that Raven (2004: 9) identified in DTC advertisements, *vulnerability of people*, is the type of emotion reflected in this advertisement. The *vulnerability* refers to a couple or partner that desires the love and happiness portrayed in the photograph. This form of emotion aroused by a photograph is seen as an *associative mode of persuasion* (Tellis, 2004: 158). Here, the photograph develops an emotional message that persuades consumers to use the treatment.

The positive cues incorporated into this advertisement can also be used as motivational tools to support its claims, to improve a troubled relationship or marriage as a result of erectile dysfunction. In accordance with Maslow’s Hierarchy of Needs, this treatment aims to satisfy a social need (Belch & Belch, 2004:109; De Beer, *et al*., 1998: 214). Here, the social need is a need for love.

### 7.3 PROBLEMATIC AREAS IN PHARMACEUTICAL ADVERTISEMENTS FOUND IN SOUTH AFRICA

With respect to the three pharmaceutical advertisements analysed, various areas can be seen as problematic. In the erectile dysfunction awareness advertisement two major ethical problems were identified. The first problem identified was that the photograph can give a false perception about the treatment offered for erectile dysfunction. Consumers may conclude that this treatment will not only help them with the medical problem but also restore their troubled relationships. Another problem that can be identified is that the advertisement do not clearly state that this treatment is only available by means of a prescription. This can frustrate consumers if they are told by pharmacists that they should first visit their doctors to obtain a prescription.

In the Panado® MedSip advertisement a major ethical problem was identified. The pictorial representation of the naturally occurring honey, lemon, and ginger, in combination with the lexical portion describing the chicken soup, can give a false impression that this medicinal drink is natural and not a medicine that contain paracetamol as active ingredient. Furthermore, it can create the impression that this
medicinal drink is just as safe as these natural products but in fact, because of its active ingredient, can be potentially dangerous if used incorrectly.

In the Phytocor® advertisement two ethical problems were identified. As indicated in the results chapter (see Chapter six, Section 6.4.2.4), the word “optimal” can create the impression that this dietary supplement is superior to any other supplement to protect a person’s heart against cardiovascular disease. The word, “optimal” has a similar function as superlative words (for example, “the best”) which are prohibited by the Marketing Code in SA from being used in pharmaceutical advertisements (Code of Practice, 2004). The other ethical problem identified was that Phytocor® can be obtained without a prescription but no mention was made about Phytocor® Plus. This can create confusion amongst consumers as they can assume that Phytocor® Plus cannot be obtained without a prescription. This is despite the fact that Phytocor® Plus is also a dietary supplement where normally no prescription is required to obtain it.

Problematic areas in the SA pharmaceutical advertising law were identified and discussed in Chapter four. Three problematic areas were identified. Firstly, it was determined that there are too few authorities to regulate pharmaceutical advertisements. Another area of great concern was the confusion caused by Regulation 45(2), Subsections (b) and (c), of the Medicines and Related Substances Act 101 of 1965, as amended, regarding the advertising of medicines to the general public. Subsection (b) states that Schedule 2 to Schedule 6 medicines may not be advertised to the general public whereas Subsection (c) states that these scheduled medicines may be advertised to inform the general public of its price, name, pack size and strength (Pharmaceutical Society of South Africa Pharmacy Law Compendium, 2005: MRE - 51). The third problem identified a lack of legislation regarding the advertising of medicines with a high abuse potential.

7.4 CONCLUSION

The aim of this study was to identify how consumers in SA perceive pharmaceutical advertisements in print form. From the literature study it is evident that there is a lack of information regarding the study of pharmaceutical advertisements in SA. An intensive
literature review revealed that, as of yet, no in-depth study have been conducted to prove how consumers in SA may be affected by pharmaceutical advertisements in print form.

Various approaches such as semiotics, colour interpretation, and decoding were employed in this study to illustrate probabilities of how consumers may perceive pharmaceutical advertisements. By using these various approaches, it was possible to determine how consumers can interpret pharmaceutical advertisements and that there is the possibility for misinterpretation. The results identified that pharmaceutical advertisements in print form are often interpreted incorrectly which resulted in misinterpretation.

With the aid of the literature and findings of this study, it was found that various cues are used in pharmaceutical advertisements to lead consumers into interpreting these advertisements in such a way as to result in a positive outcome for the sponsor. It was also found that pharmaceutical advertisements persuade consumers to react positively towards the products advertised. Furthermore, it was found that many pharmaceutical advertisements employ emotional appeal to persuade consumers. Colour was also employed in pharmaceutical print advertisements, not only to attract attention but also to reinforce their persuasive messages.

A literature review regarding pharmaceutical advertising law in SA indicated that the correct measures are in place to regulate these advertisements. However, it was evident that, due to a lack of regulatory authorities, it is highly unlikely that pharmaceutical advertisements will be properly regulated. Various problematic areas were also identified in SA legislation.

The data collected during this study succeeded in achieving this study’s primary aim and more specific objectives. Valuable information was obtained and indicated that ongoing research regarding this topic is needed.
7.4.1 Recommendations

Due to the shortage of regulatory authorities in SA, it is recommended that more be done to regulate pharmaceutical advertisements. Because of economic constraints and a lack of skilled workforce in SA, it may be advisable to establish more self-regulatory authorities within the pharmaceutical industry. By doing so, regulation of pharmaceutical advertisements can be improved which will ultimately protect the consumer.

Furthermore, it is also necessary to focus on the problematic areas identified in SA legislation regarding pharmaceutical advertisements. One problem that needs specific attention is the discrepancy between Subsection (b) and (c) of Regulation 45(2) of the Medicines and Related Substances Act 101, as amended, regarding the advertising of medicines to the general public. There is thus a need to review these two Subsections and debate the controversy that exists to prevent future confusion.

7.4.2 Limitations to the study

Due to various factors the empirical portion of the study could only be conducted in the NMM. Although the results obtained from this study did achieve the primary aim set, it will be advisable to conduct such a study nationally.

It can also be argued that the participants selected for the focus group were only representative of an age group not older than 33 years. A more representative view would have been obtained if a sample of different age groups was selected.

There is also a lack of primary resources regarding pharmaceutical advertising, semiotics, and the process of decoding pharmaceutical advertisements. Little international research has been conducted regarding the use of semiotics in the decoding process of pharmaceutical advertisements to determine the perceptions towards pharmaceutical advertisements. Such research has not been done in SA as of yet. This resulted in the use of the Internet to obtain the necessary information.
7.4.3 Suggestions for future research

The focus group and consumer survey conducted identified various areas that require future research. Two aspects were prominent in the focus group discussion, namely the advertising of slimming products and pharmaceutical advertisements on the Internet. In the focus group, as well as the consumer survey, results unanimously indicated that consumers believed that slimming advertisements were misleading. It can therefore be suggested that the effect of slimming advertisements should be investigated. Results obtained from such a study can determine if such advertisements have any negative effects on consumers’ health. Legislation regarding the advertising of medicines on the Internet can also be investigated as there are many problematic areas regarding this.

Furthermore, as was reflected in the consumer survey, the major media preferences of consumers are television and radio. Similar studies can be conducted on pharmaceutical advertisements found in these media.

Lastly, in-depth techniques can be performed to determine more effectively what the effects of pharmaceutical advertisements on consumers are. Laboratory techniques such as neuromarketing will identify how consumers are affected on a psychological and physiological level by pharmaceutical advertisements.

7.4.4 Concluding remarks

It is a fact that pharmaceutical advertising is a popular and lucrative marketing tool that will grow exponentially with time in SA. However, results obtained from this study indicate that pharmaceutical advertisements require more regulation as it is a persuasive form of communication which can be misinterpreted and often mislead consumers.

It must be realised that, due to these disadvantages, pharmaceutical advertisements should not be used as the primary choice of information to educate consumers about their healthcare needs. As with the advertisements for cigarettes and alcohol, the educational
value of pharmaceutical advertisements directed at consumers are doubtful. Consumers should in fact be educated about the disadvantages of pharmaceutical advertisements.

Here, the value of pharmacists’ healthcare skills should be realised. Pharmacists’ counselling skills should ideally be used as primary educational tool to convey valuable healthcare information to consumers.
REFERENCES


ASA, New Zealand. Refer to Advertising Standards Authority Inc., New Zealand.

ASA, South Africa. Refer to Advertising Standards Authority of South Africa.


Community pharmacy advertisement in Port Elizabeth. 2007. *Die Burger*. Tuesday, March 1, p. 3.


Drug Digest. 2007. Ludiomil®. [Web:] http://www.drugdigest.org/DD/DVH/Uses/0.3915,405%7/CLudiomil,00.html [Date of access: 08 February 2007].


Masango, A. 2006. *Pharmacies and Pharmaceutical companies fined in excess of R100 000.00 for contravening regulations on advertising.* Pharmaciae, vol. 141, no. 9, (December), 12 – 13.


Richards, JI. 2004. Commercial advertising. [Web:] http://advertising.utexas.edu/research/terms/ [Date of access: 03 June 2006].

Sales representative handout from Novartis, 2006. Advertisement: Zelnorm®.


University of Texas. 2007. Analysing, Interpreting, and Reporting Focus Group Data for Project Evaluation. [Web:] http://www.utexas.edu/academic/diia/assessment/iar/how_to/interpreting_data/focus_groups/publication.php [Date of access: 25 June 2007].


http://content.healthaffairs.org/cgi/reprint/19/2/110.pdf [Date of access: 07 May 2006].


http://www.consumersinternational.org/Shared_ASP_Files/UploadedFiles/BD980F84-9011-485E-E-B14C-7D9/E18A6D1A_WCRD1MemberBriefingEN.pdf [Date of access: 21 May 2007].


You. 2006b. Advertisement: Citro-Soda®. Tuesday, 03 April. p34.


APPENDIX A: FOCUS GROUP PREAMBLE

Department of Pharmacy
Nelson Mandela Metropolitan University
Tel: +27 (0)41 504-2128
Fax: +27 (0)41 504-2744
E-mail of researcher: bck-2001@hotmail.com

Date: ______________________

Ref: N 01/11/03/07 [H06Hp-032/Approval]

Contact person: Brent Claud Knoesen

Dear participant

You are invited to participate in a focus group as part of a research study which aims to identify how consumers perceive pharmaceutical advertisements. A focus group is a group interview method where participants are selected to discuss a broad range of ideas regarding a specific topic.

The researcher will provide you with the necessary information to assist you in your understanding of the study and will explain to you what you should expect as a participant. Although you will be required to provide written consent, participation in the focus group is voluntary and you are under no obligation to participate. You also have the right to withdraw at any given time. However, if you do withdraw, you should inform the principal investigator of such a decision. Furthermore, although this study has been approved by the Research Ethics Committee (Human) (RECH) of the Nelson Mandela Metropolitan University, the study may be terminated at any time by the principal investigator, University, or the RECH of the University that initially approved the study. It is also important for you to know that, although your identity will remain confidential at all times, these research results may be presented at scientific conferences or in specialist publications.

Furthermore, should you wish to continue receiving any further therapeutic intervention subsequent to your participation in the focus group, the University Psychology Clinic (UCLIN) can be contacted on (041) 504-2330 in this regard.

Yours sincerely,

Brent Claud Knoesen
(Principal Investigator)
FOCUS GROUP PROTOCOL

(Duration: 1 hour and 15 minutes to 1 hour and 30 minutes)

• Introduction (5 minutes)

Ice breaker is used to allow participants to become acquainted.

• Group task one (10 minutes)

The following general question is asked:

What do you think of advertisements in print form (in other words advertisements found in, for example, magazines and newspapers)?

• Group task two (30 minutes): General discussion

Prompts for general discussion:

1. Do you think pharmaceutical advertisements play on consumers' emotions?
2. Do you think that pharmaceutical advertisements mislead consumers?
3. Are pharmaceutical advertisements often difficult to understand?
4. Do colour and pictures attract your attention when looking at advertisements?
5. Have you ever asked your general practitioner or pharmacist about a pharmaceutical product advertised or even bought the product?
6. Do you feel that prescription medicines should be advertised to the general public?

• Group task three (25 minutes): Opinions about pre-selected advertisements

Three pharmaceutical advertisements are shown to the group and their opinions are asked about them.

• Conclusion/Debrief (5 minutes)

The group is asked if there is anything else they want to add to the discussion or want to ask about the study. Participants are thanked for their participation.
APPENDIX C: PHYTOCOR®

The lifestyle choices we make, such as not smoking, eating a healthy diet and regular exercise, can all help to protect our hearts. There is also increasing medical evidence that points to the beneficial effects of nutrients such as omega 3 fatty acids and the B group vitamins.

Ideally, we should get sufficient quantities of these nutrients from our diet. But we could also get that little extra help by taking a supplement that has been especially formulated to help lower cholesterol and protect against cardiovascular disease.

**Phytocor** and **Phytocor Plus** offer an optimal formulation of proven, natural ingredients that enhance your efforts to maintain a healthy heart.

(Source: Pharma Dynamics, 2006)
APPENDIX D: PANADO® MEDSIP

Just like chicken soup, only without the chicken. And it’s not soup.

Available in Honey Lemon and Ginger

For a safe and effective remedy from pain and fever, moms choose Panado®. Drink a hot cup of Panado® MedSip when the symptoms of colds and flu strike and the medicated formula will go to work, soothing and comforting you. It’s tartrazine-free and contains Vitamin C. Put your trust in the Panado® range.

(Source: You, 2006d: 45)
APPENDIX E: ERECTILE DYSFUNCTION AWARENESS

THINK PASSION NOT PRESSURE

When your partner has erectile dysfunction, the problem is not his alone. It's an issue which can be trying on your relationship. However, through understanding, compassion and helpful advice, you can once again start to enjoy the selfsame intimacy. With a treatment that offers up to 36 hours of freedom, you have the opportunity to reignite the passion when the time is right. So ask your doctor or pharmacist about the treatment that allows you and your partner the freedom to get close again.

Alternatively visit www.36hours-offreedom.co.za or call 0860 100 262.

Brought to you by Lilly in the interest of healthy relationships.

(Source: Fair Lady, 2006: 17)
APPENDIX F: CONSUMER SURVEY QUESTIONNAIRE

PHARMACEUTICAL ADVERTISING

CONSUMER QUESTIONNAIRE

Please mark your answer with an ‘X’ in the appropriate box or write your answers to the questions or statements in the spaces provided.

1. DEMOGRAPHICS

1.1 Age (years)

1.2 Gender Male Female

1.3 Occupation

1.4 Do you currently belong to a medical aid? Yes No

1.5 Do you suffer from any chronic conditions (for example, diabetes, high blood pressure, or asthma)? Yes No

2. LEISURE PREFERENCES IN TERMS OF MASS MEDIA

<table>
<thead>
<tr>
<th></th>
<th>Daily</th>
<th>3-6 times per week</th>
<th>1-2 times per week</th>
<th>Once a month</th>
<th>Never</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.1</td>
<td>I watch television</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.2</td>
<td>I listen to the radio</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.3</td>
<td>I read newspapers</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.4</td>
<td>I read magazines</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.5</td>
<td>I read my pharmacy newsletter</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.6</td>
<td>I read handouts and flyers</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.7</td>
<td>I use the Internet</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
3. PHARMACEUTICAL ADVERTISING IN GENERAL

Please mark each statement with an ‘X’ by using the following scale:

<table>
<thead>
<tr>
<th>Agree</th>
<th>Disagree</th>
<th>Undecided</th>
</tr>
</thead>
</table>

3.1 I find pharmaceutical advertisements informative

3.2 I ask my doctor or pharmacist for more information after seeing a pharmaceutical advertisement

3.3 Pharmaceutical advertisements lack important information

3.4 Pharmaceutical advertisements are difficult to understand

3.5 Pharmaceutical advertisements are misleading

3.6 Pictures of models used in slimming advertisements or other pharmaceutical advertisements create a false impression

3.7 Pharmaceutical advertisements are directed at consumers who are emotionally vulnerable

3.8 Colourful pharmaceutical advertisements attract my attention

3.9 Pharmaceutical advertisements are interesting when a picture appears in it

3.10 Disease awareness advertisements create unnecessary fear
4. EVALUATION OF PHARMACEUTICAL ADVERTISEMENTS

Take time to look at each advertisement. Mark each statement with an ‘X’ by using the following scale:

<table>
<thead>
<tr>
<th>Agree</th>
<th>Disagree</th>
<th>Undecided</th>
</tr>
</thead>
</table>

**Panado® MedSip**

4.1 I like the phrase, “just like chicken soup”

4.2 Panado® MedSip has the same qualities as the old traditional remedies portrayed in this advertisement

4.3 It is dangerous to compare medicines to food

4.4 The yellow colour makes this advertisement attractive

**Erectile dysfunction awareness advertisement**

4.5 The advertised medicine alluded to can improve someone’s troubled relationship or marriage

4.6 My pharmacist can give this medicine without me having to see a doctor

4.7 I will visit the website given in the advertisement to get more information about the medicine

4.8 It is good to create awareness of conditions such as erectile dysfunction

THANK YOU FOR YOUR PARTICIPATION
Dear Participant

INFORMED CONSENT FORM

I, ........................................................................................................, identity number .............................................................., hereby confirm my participation in the research project undertaken by Brent Claud Knoesen (principal investigator) of the Department of Pharmacy in the Faculty of Health Sciences at the Nelson Mandela Metropolitan University.

The following aspects have been explained to me, the participant:

1.1 The primary aim of this study is to identify how consumers perceive pharmaceutical advertisements.
1.2 To achieve this aim I will participate in a focus group where the impact of pharmaceutical advertisements on consumers will be discussed.
1.3 The potential risks involved in participating in the focus group are minimal.
1.4 My confidentiality as participant will be ensured as no names of any participants will be published.
1.5 My participation in this focus group is voluntary. No pressure was exerted on me to consent to participate and I may withdraw at any stage during the focus group.
1.6 I am aware that a voice recorder will be used to tape the discussion. The voice recorded data will be used for transcribing purposes only and will be held confidential at all times.
1.7 Participation in this focus group will not result in any cost to me.

I, ........................................................................................................, hereby voluntary consent to participate in the focus group as part of the above mentioned research project.

Signed and confirmed at ................................................................. on ..................................................... 2007.

________________________________________
(Participant)

Brent Claud Knoesen
(Principal investigator)

________________________________________
(Witness)
Dear community pharmacy owner and/or responsible pharmacist

You are invited to participate in a research study which focuses on how consumers perceive pharmaceutical advertisements. This entails a consumer survey with 10 customers in your community pharmacy. The principal investigator will provide you with an overview of the study and how it will be conducted.

Your participation, and that of your customers, is voluntary and you are under no obligation to participate. You also have the right to withdraw at any given time but in doing so, the principal investigator should be informed of such a decision. However, to participate, you as owner and/or responsible pharmacist of the community pharmacy will be required to provide written consent.

Confidentiality and anonymity of you as community pharmacy owner and/or responsible pharmacist, your community pharmacy, and that of your customers will be ensured at all times. No names will be published in the dissertation or any article thereof, or mentioned at any science conference.

This study has been approved by the Research Ethics Committee (Human) (RECH) of the Nelson Mandela Metropolitan University. The study may however, be terminated at any time by the principal investigator, University, or the RECH of the University that initially approved the study.

Yours sincerely,

Brent Claud Knoesen

(Principal investigator)
APPENDIX I: CONSENT FORM TO COMMUNITY PHARMACY

Department of Pharmacy
Nelson Mandela Metropolitan University
Tel: +27 (0)41 504-2128
Fax: +27 (0)41 504-2744
E-mail of researcher: bck-2001@hotmail.com

Date: ______________________

Ref:  N 01/11/03 [H06Hp-032/Approval]

Contact person:  Brent Claud Knoesen

Dear community pharmacy owner and/or responsible pharmacist

INFORMED CONSENT FORM

I, ........................................................................................................ (identity number: ........................................................), the owner and/or responsible pharmacist of ........................................................................................................ (community pharmacy name), hereby confirm my participation in the research study undertaken by Brent Claud Knoesen (principal investigator) of the Department of Pharmacy in the Faculty of Health Sciences at the Nelson Mandela Metropolitan University.

The following aspects have been explained to me, the owner and/or responsible pharmacist:

1. The aim of the research study is to determine how consumers perceive pharmaceutical advertisements.
2. The procedure of the consumer survey will involve a convenience sample of 10 customers in my community pharmacy.
3. The potential risks involved in participating in the consumer survey are minimal.
4. My confidentiality, and that of my community pharmacy and its customers, will be ensured at all times as no names will be published.
5. Participation of my community pharmacy and its customers are voluntary.
6. No pressure was exerted on me or my customers to participate.
7. Any new information and/or benefits resulting from this research study will be shared, either verbally, or in the form of a guideline or published article.

I hereby consent to participate in the consumer survey of this research study.

__________________________________
(Owner and/or responsible pharmacist)

Brent Claud Knoesen

______________________________
(Principal investigator)

______________________________
(Witness)
# Glossary

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Full Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASA</td>
<td>Advertising Standards Authority</td>
</tr>
<tr>
<td>DTC</td>
<td>Direct-to-consumer</td>
</tr>
<tr>
<td>MCC</td>
<td>Medicines Control Council</td>
</tr>
<tr>
<td>NDP</td>
<td>National Drug Policy</td>
</tr>
<tr>
<td>NMM</td>
<td>Nelson Mandela Metropole</td>
</tr>
<tr>
<td>OTC</td>
<td>Over-the-counter</td>
</tr>
<tr>
<td>SA</td>
<td>South Africa</td>
</tr>
<tr>
<td>SAPC</td>
<td>South African Pharmacy Council</td>
</tr>
<tr>
<td>USA</td>
<td>United States of America</td>
</tr>
<tr>
<td>WHO</td>
<td>World Health Organisation</td>
</tr>
</tbody>
</table>