A SURVEY TO DETERMINE THE PERCEPTIONS OF GENERAL PRACTITIONERS AND PHARMACISTS IN THE GREATER DURBAN REGION TOWARDS HOMOEOPATHY

By:

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I, Dheepa Maharajh, declare that this mini-dissertation represents my own work both in conception and execution.

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DEDICATION

I dedicate this dissertation to my parents Rishipaul Ramnath Maharajh and Urmila Devi Maharajh for their love, support and wisdom. I am eternally indebted to you both.

To my loving husband Sathish for being my inspiration.

To Donovan Dasappa, for teaching me to live the dream.

To Mrs. A Sookan, a caring and dedicated teacher.

To close friends who give meaning to life.

"Homoeopathy cures a greater percentage of cases than any other method of treatment. Homoeopathy is the latest and refined method of treating patients economically and non-violently."

- Mahatma Gandhi
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ABSTRACT

Homoeopathy in South Africa is a relatively new health profession, and there seems to be limited awareness of homoeopathy amongst the public and healthcare authorities. The national health care system in South Africa is currently undergoing major restructuring, with the focus on primary health care. The homoeopathic community needs to reflect on its role in public health care. However, in order to gain acceptance and understanding from other health care professions, meaningful research needs to be conducted. There is an urgent need to investigate the views of conventional health care professionals towards homoeopathy.

A survey method was employed to investigate the perceptions of homoeopathy of two major groups in the medical community in the Greater Durban area: General Practitioners (GPs) and pharmacists.

The study was carried out by using a questionnaire as a measuring tool. The sample of GPs was drawn from the medical pages of the Durban Telephone Directory (October 2003/2004) and the sample of pharmacists was drawn from the Durban Yellow Pages (October 2003/2004). A total of 484 questionnaires were distributed and a total of 155 responses were received. The percentage of return of questionnaires was 32,02%. The original sample size was 370 for GPs and 114 for pharmacists. A total of 97 GPs and 58 pharmacists responded. The response rate was 26,22% for GPs and 50,87% for pharmacists.
The study was completed in 3 stages:

1. Pilot study
2. Postage of questionnaires
3. Re-postage of questionnaires

The data was analysed by means of descriptive statistics using frequency tables and bar charts. The Pearson’s Chi-square Test was used on selected data. On analyzing the results it can be seen that the majority of respondents were male.

The majority of pharmacists who responded were between the ages of 26-35 years and had been practicing for 11-15 years. The majority of GPs were between the ages of 46-55 years and had been practicing for 21-30 years.

Most responses were received from the central Durban area, largely because of a high density of businesses (including pharmacies and GPs) being located in the city.

In general, most GPs and pharmacists had some knowledge of homoeopathy. The majority knew that homoeopathy is legally recognized in South Africa, and were aware of training institutions for homoeopathy in our country.

Only half of the GPs and less than half of the pharmacists perceived that homoeopathy has a scientific basis.

65% of both groups perceived that homoeopathy was a legitimate form of medicine. Generally, communication and co-operation between GPs/pharmacists
and homoeopaths was considered to be either non-existent or poor by both groups. 68.4% of pharmacists and 79.8% of GPs perceived that co-operation amongst the different parties (pharmacists, GPs and homoeopaths) would be beneficial to all.

Results were varied concerning the skill of homoeopaths, suggesting doubt and skepticism towards homoeopathy and homoeopathic training. No associations were found between the age group and duration of practice of pharmacists and GPs and their perception of the skill of homoeopaths.

Overall, most GPs and pharmacists were uncomfortable with homoeopathy, but perceived it to be effective for some patients. A large percentage of respondents felt that they were not informed enough to comment.

The study raised a few areas of concern. Firstly the limited communication and co-operation between pharmacists, GPs and homoeopaths, implying that there may be lack of understanding between homoeopaths and GPs/pharmacists. Secondly, there seems to be lack of knowledge on the nature of homoeopathic training that is available in South Africa, which may have contributed to the skepticism and doubt that existed amongst most respondents.

From this study one can conclude that GPs and pharmacists know very little detail about homoeopathy and homoeopathic training, and it can be assumed that this lack of knowledge is a possible reason for the poor communication and co-operation that currently exists between these practitioners and homoeopaths.
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DEFINITION OF TERMS

Acupuncture

"Acupuncture is a traditional Chinese health treatment, which involves the use of needles to stimulate energy points in the body"
(Bradford, 1996:10).

Aromatherapy

"Aromatherapy uses pleasant smelling essential oils to help relieve tension and improve a person's general health and well-being. They can be used as a part of a relaxing massage, in steam inhalations, in baths, or in diffusers and vaporizers to release calming or invigorating smells into the atmosphere"
(Bradford, 1996:68).

Ayurveda

"Ayurveda is a Sanskrit word meaning: 'the science of life'. It is a combination of science and philosophy, which details the physical, mental, emotional and spiritual components necessary for holistic health. It is a complete healthcare system and involves detoxification, diet, exercise, use of herbs and techniques to improve mental and emotional health"
(Bradford, 1996:30).
Chiropractic

“Chiropractic is a therapy which involves treatment on the musculo-skeletal system, with particular emphasis on the spine and nervous system” (Bradford, 1996:48).

Herbalism (= Western Herbalism)

“Western Herbalism uses the curative aspects of numerous plants to keep people healthy and their bodies balanced” (Bradford, 1996:92).

Naturopathy

“Naturopathy is a health care system that features only natural ingredients and disciplines. Treatment might include a healthy diet, fasting, hydrotherapy exercise and relaxation techniques” (Bradford, 1996:98).

Osteopathy

“Osteopathy is a therapy that uses manipulation on the whole body – the skeleton, muscles, ligaments and tissues – to reduce discomfort, improve joint movement and restore the person to full health” (Bradford, 1996:38).
Reflexology

"Reflexology is a therapy that involves applying pressure to points on the feet and sometimes the hands. Therapists believe that by working on a particular point they can stimulate energy by a reflex action to a related muscle or organ and encourage healing. The treatment is relaxing and can help stress and digestive problems"

(Bradford, 1996:60).
CHAPTER 1

INTRODUCTION

Homeopathy, using the tenet of "like cures like" is one of the most popular of the complementary medicines. In conventional medicine, however, little is known about this modality (D'Huyvetter and Cohrssen, 2002).

Homoeopathy is recognized as being the fastest growing medical modality in the world. The perception of homoeopathy is changing and there is a growing demand to learn more about homoeopathy. In South Africa the homoeopathic industry has been growing steadily (Prinsloo, 2000). Traditional healers and complementary therapies are gaining recognition, so that they too can form part of public health care services (Traditional Health Practitioners Act, no. 35 of 2004). This affords the homoeopathic profession a unique opportunity to become an integral part of health care in South Africa, and to clear up misconceptions that may exist regarding homoeopathy.

Homoeopathy has played a role in the health care of South Africans since the nineteenth century (Frazer, 1988), but it has never formed part of the public health care system. Instead, homoeopathy has played a role in the peripheral medical system, which has gradually gained more legal recognition. In 1974 homoeopathy became a registered profession. The right to train and register new homoeopathic practitioners was granted in 1985, and training began at Technikon Natal in 1989,
and then at Technikon Witwatersrand in 1993 (Steenkamp 1987; Bloch, Kerschbaumer, Linder and Tennant-Blakeway 1995). Homoeopaths are now registered with the Allied Health Professionals Council of South Africa (AHPCSA)\(^2\) that was established in terms of Act 63 of 1982. Now, in the new millennium, the profession faces the challenge of becoming part of the public health care system.

Recently, patients have started to demand a new model of health care that is built on a broader concept of health and that integrates complementary and alternative therapies with conventional medical approaches (Bell, Caspi, Schwartz, Grant, Gandet and Rychener, 2002). Informed consumers of the 21\(^{st}\) century are looking for a medical system that incorporates all of the dynamics that exist in a person. People everywhere want healthcare that empowers them and provides the opportunity for them to be part of the healing team. Pharmacists and general practitioners (GPs) can play a major role in fulfilling this need, by combining conventional medicine with the healing potential of complementary therapies.

Current literature shows that awareness of complementary medicine, including homoeopathy, has increased throughout the world during the past 20 years (Prinsloo, 2000; Jonas, Kaptchuk and Linde, 2003; Tovey, Easthope and Adams, 2003) and one could expect a similar trend to be reflected in the South African context.
In order to gain acceptance and understanding from other health care professions, meaningful research needs to be conducted. This study evaluates the perceptions toward homoeopathy of two major groups in the medical community in the greater Durban area, namely pharmacists and GPs.

A survey was conducted to assess perceptions of pharmacists regarding complementary medicine in South Africa (Daphne, 1997). It was concluded that the majority of pharmacists knew nothing or very little about ayurveda, osteopathy, chiropractic, acupuncture, reflexology, herbalism, aromatherapy and homoeopathy. However, the results of this study are now 9 years old, and much has changed in South Africa and its medical system in the last 10 years. Current research is required to re-assess opinions of pharmacists towards complementary medicine and homoeopathy in particular.

In 1998, Sukdev conducted a study on the perceptions of medical practitioners with regard to complementary medicine in South Africa. The results of this survey are now 8 years old. Further research in this area will therefore be valuable.

This study is significant in that it is the first survey to assess perceptions of both pharmacists and GPs in the greater Durban area – thus giving a wider perspective on perceptions of the greater medical community of homoeopathy. Further, no research has ever been conducted concerning the perceptions of the level of education and training that homoeopaths are required to undergo. There has been much skepticism towards homoeopathy and the competency of homoeopathic
practitioners. This study provides a proper assessment of the awareness of the nature of homoeopathic training in this country.

This investigation aimed to ask the question, “What does the medical community in the greater Durban area know of homoeopathy?”

The data obtained from this study may contribute to the integration of complementary and conventional medicine in South Africa, and in this way assist in the creation of a health care system suited to our diverse and developing country.
CHAPTER 2

REVIEW OF THE RELATED LITERATURE

2.1 Introduction

A search of the relevant literature indicates a growing interest worldwide in complementary medicine over the past two decades.

Homoeopathy is viewed as one of the more "respected and utilized" complementary therapies (Smith 1989) and, according to Fulder and Munro (1985) and Thomas, Carr, Westlake and Williams (1991), homoeopathy may be considered as one of the six main professions amongst the many different complementary therapies available. The other five therapies are acupuncture, chiropractic, herbalism, naturopathy and osteopathy.

Numerous studies (Daphne, 1997; Sukdev, 1997; Thomas, 2003; van Haselen, 2005) reveal the need for changes in allopathic dominated health care systems such as that in South Africa, and for co-operation between conventional and complementary therapists (Shuval, Mizrachi and Smetannikov, 2002; Tovey, Easthope and Adams, 2003; Singh, Raidoo and Harries, 2004;).
2.2 Trends in complementary medicine

2.2.1 Global trends

Homoeopathy held a prominent place in 19th century healthcare and has recently undergone a worldwide revival (Jonas, Kaptchuk and Linde, 2003). The popularity of complementary medicine has increased in the United States and Europe. In 1997, Americans made a staggering 629 million visits to complementary and alternative practitioners, far exceeding the 386 million visits made to primary care physicians during the same year. The number of patients using homoeopathy in the United States is estimated to have increased by 500% in the last 7 years (Eisenberg, Davis, Ettner, Appel, Wilkey, Van Rompay and Kessler, 1998). In Europe, complementary therapies are used by 20-50% of the population (Fisher and Ward, 1994).

The demand is generated by a number of factors, which possibly include fear of conventional drugs' side effects, general dissatisfaction with existing therapies and the need for cost effective treatments, particularly in the current situation of budget cutting and declining resources. The fact that chronic health care problems are on the rise all over the world and are not being effectively addressed by present treatments also contributes to the need for health care reform (Kayne, 1993).

The rise of complementary and alternative medicines (CAM) has been encouraged by the continuing mainstreaming of these medicines, both in terms of increasing community consumption and the growing attempts to incorporate and integrate
CAM alongside conventional health care (Tovey, Easthope and Adams, 2003).

The Lewisham Hospital, London, England has successfully integrated natural medicine into the public health service. An outpatient service has been set up offering acupuncture, homoeopathy and osteopathy (Richardson, 1996). The Glasgow Homoeopathic Hospital in Scotland serves as a primary health care centre and also has academic departments for training of homoeopaths. Surveys conducted by the academic departments of Glasgow Homoeopathic Hospital have shown that 20% of all Scottish family doctors have attended at least one part of the postgraduate courses in homoeopathy run in Glasgow. The Glasgow courses are, in fact, the most popular courses in postgraduate medical education, in any discipline, in the whole of the UK (Leckridge, 1997).

Homoeopathy is one of the recognized systems of medicine in India and is widely practiced. There are 0.3 million qualified homoeopaths, 180 colleges, 7500 government clinics, 307 hospitals and 24 state boards for the registration of qualified practitioners of homoeopathy in India (Manchand and Kulashreshtha, 2005).

The Centre for the Study of Complementary Medicine found that the majority of patients choose to consult an alternative practitioner as a last resort or due to the failure of conventional medicine (Finnegan, 1991).

A study in Kassel, central Germany, assessed the perceptions of ten medical doctors who made use of complementary therapies in their practices (Himmel,
Schulte and Koshen, 1993). Of the 310 patients who took part, 122 (39.4%) had had complementary treatment; fifteen of these patients having had homoeopathic treatment. The patients showed much interest in complementary medicine: 68.4% expressed a desire to receive complementary treatment more often and 57.7% said that they preferred complementary medicine to conventional treatment. Of the 47 patients who had requested complementary treatment, seven (14.9%) had asked for homoeopathy, thus making it the second most requested therapy after herbal medicine (68.1%).

Himmel, Schulte and Koshen (1993) found that positive attitudes towards complementary medicine were not necessarily associated with critical attitudes towards medical doctors (Cf. Vincent and Furnham 1994).

2.2.2 Trends in South Africa

(a) Legislation

In the past century, the practice of complementary medicine in South Africa has been restricted. In 1953 complementary medicine was declared illegal and unscientific, and in 1974, the Medical, Dental and Supplementary Health Care Service Professions Act only provided registration for practicing complementary practitioners and did not provide for admission of new practitioners (Pretorius, 1993).

The turning point of complementary medicine came in 1982. Legislation was accepted (Act 63 of 1982) which facilitated training into certain complementary
therapies. In this regard, South Africa set an example for other countries in respect of the process of legitimization of complementary medicine (Pretorius, 1993).

There is a growing interest in the practice of complementary medicine as evidenced by the formation of the South African Complementary Medicine Association (SACMA), and the fact that the Science and Education Committee of the Medical Association of South Africa (MASA) is examining the role that complementary medicine plays in health care (Lee, 1992).

(b) Public Response

Numerous articles, advertisements and supplements on CAM are appearing in the local and regional South African newspapers such as the Chatsworth Times, Rising Sun, Sunday Tribune and Post, as well as local magazines such as Durban’s Metro Beat. These heighten public interest and lend authority to therapies or medicines that were previously labeled as merely having a placebo effect (Singh, Raidoo and Harries, 2004).

Singh, Raidoo and Harries (2004) conducted a study entitled “The prevalence, patterns of usage and peoples’ attitude towards complementary and alternative medicine (CAM) among the Indian community in Chatsworth, South Africa.” Face-to-face interviews were conducted on 200 randomly selected adult English-speaking Indian residents. The prevalence of CAM usage for the period 2000/2001 was found to be 38.5% - this is comparable to results reported elsewhere in the world: 40% in the USA (Eisenberg, Davis, Ettner, Appel, Wilkey, Van Rompay and
Kessler, 1998) and 48.5% in Australia (MacLennan, Wilson and Taylor, 1996). The two major types of CAM used were herbal/natural medicines (including homoeopathy) and spiritual healing. 79% of CAM users indicated that they had positive outcomes with their treatments. 46.8% of CAM users reported using CAM alone, while 50.7% used CAM together with allopathic medicines prescribed. The study also evaluated the level of communication with medical practitioners. 53.8% of CAM users did not inform their GPs that they were using CAM. Of this group, 89.3% responded with the following reasons: 53.6% thought it was unnecessary to inform their doctors; 7.1% felt that their doctor might become upset and 28.6% stated that their doctor did not enquire. The study concluded that the inclusion of an outline of alternative therapies in the curricula of South African medical schools should be considered as a way to improve caregivers' understanding of their patients' health belief systems and usage of CAM. These findings support a need for greater integration of conventional and complementary medicines.

A survey carried out by Steenkamp in 1984 found that 17% of white South Africans had never heard of homoeopathy, chiropractic or any other alternative health profession. It was estimated from the survey that approximately 600 000 Whites in South Africa had consulted a chiropractor or homoeopath. Of the respondents, 53.2% were in favour of the recognition of complementary medicine by medical aid schemes (Steenkamp, 1987).
(c) **A need for re-organization**

Highly inappropriate emphasis and orientation in health care, driven by professional, political and financial interests, have given rise to indiscriminate, unjustified and wasteful decisions regarding the provision of care (Yach, 1994).

The result is an alarming lack of synchronization and co-ordination in South African health care – both among the various composing parts of structurally fragmented health care systems and between supply of and the demand/need for services (Van Rensburg and Fourie, 1994). Correcting the balance could mean that we could buy substantially more health for our existing rands. But to shift resources requires strong political commitment to break what has become strong vested interests (Yach, 1994).

Health care providers often believe that they are delivering the highest quality health care service that they can under the circumstances, and until recently doctors were rarely challenged about the quality of medical care. Medicine has been able to achieve control over the content of care, over patients, over other types of health care practitioners and over the context within which care is provided (Freidson, 1970). Recent research shows, however, that patients want to, and should be able to, choose what is best for them, be it complementary or conventional medicine or a combination of both (van Haselen, 2005).
(d) A need for co-operation

Increasingly, people are no longer content to accept "a pill for every ill," partly because this approach sometimes does not work in practice, but also because they want to take more responsibility for their own health, rather than simply accepting the role of passive recipients of orthodox medicine (Shealy, 1999). As the public demand for CAM has grown, serious consideration is being accorded to the prospect of integrative care (Thomas, 2003). While there is little consensus concerning how an integrated system of health care should be operationalized, the basic principle is the use of non-heirarchical interdisciplinary teams that blend the best of both conventional medicine and CAM (Shuval, Mizrachi and Smetannikov, 2002).
2.3 **Pharmacies and complementary medicine**

2.3.1 **In the UK**

Davies and Kayne (1992) conducted a study amongst pharmacy staff. Seventeen pharmacists, 20 pharmacy technicians and 38 unqualified assistants working in 16 pharmacies in the Stoke-on-Trent area, a total of 75, completed the questionnaire. The survey occurred over two days, the pharmacies being visited without warning and without knowledge of staff registers, in order to exclude bias. All 75 questionnaires were returned and completed. It was found that the majority of the respondents 72 (96%) had heard of homoeopathy. The questionnaires of the three unqualified assistants who had not heard of homoeopathy were then excluded from the study. Of the remaining respondents, 34 (47%) replied that they thought homoeopathy was effective, six (8%) thought it was not effective and 32 (45%) were not prepared to express an opinion. When asked if they had taken homoeopathic medicine, only 20 (28%) had done so. Of this group of 20, 13 (65%) thought the medicine to have been effective.

2.3.2 **In South Africa**

A study was done to assess perceptions of pharmacists regarding the role of complementary medicine in the context of health care in South Africa (Daphne, 1997). 725 questionnaires were sent to pharmacies in Durban, Cape Town, Johannesburg, Bloemfontein, Port Elizabeth, East London and Pietermaritzburg, and 160 responses were received.
It was found that very few pharmacists (23%) had been instructed in any complementary medicine during their pharmaceutical education. 45% of pharmacists stated that a lack of knowledge was the main reason for not incorporating complementary medicine into their pharmaceutical practice. 84% of respondents agreed that complementary medicine should be included into the pharmaceutical curriculum. 49.4% of respondents had consulted a complementary medical practitioner, and 73.5% had referred a patient to a complementary medical practitioner. More pharmacists made referrals to homoeopaths (51.3%) than to any other complementary therapist. 82.5% viewed complementary medicine as being supportive therapy.

A limitation to this study was the low response rate received (21.9%). This low response rate was not adequately representative of pharmacists of South Africa, and the findings may have presented a distorted view of the knowledge of complementary medicine by pharmacists.

It was concluded that pharmacists generally had a positive and accepting attitude towards complementary medicine, but lacked knowledge of these therapies. Most pharmacists felt that there was a need to expand awareness of complementary medicine and its potential usefulness. It was also agreed that complementary medicine should play an active role in the health care system of South Africa.
2.4 Physicians and complementary medicine

2.4.1 In the USA

According to a physicians’ survey in Denver, Colorado, 76% of the respondents reported that they had patients who used complementary medicine (Winslow and Shapiro, 2002). 48% had recommended complementary medicine to a patient and 24% had personally used complementary methods. The authors commented that few physicians felt comfortable discussing complementary medicine with their patients, and the overwhelming majority (84%) thought that they needed to learn more about the subject to adequately address patient concerns.

2.4.2 In Europe

According to Ullman (1996), 39% of physicians in France prescribe homoeopathic medicines and 68% of physicians consider them to be effective. In Germany, 20% of physicians prescribe homoeopathic medicines. In England, 42% of physicians refer patients to homoeopathic physicians. 45% of Dutch physicians consider homoeopathic medicines to be effective (Ullman, 1996).

Fulder and Munro (1985) conducted a study in which virtually all non-medical complementary practitioners in Oxfordshire and the Cambridge area were personally interviewed; 60 (95%) and 37 (97%) practitioners respectively from each area. The data showed that a substantial subsidiary health care system appeared to be developing in the United Kingdom.
Rather than showing dissatisfaction with conventional medicine, Fulder and Munro's study (1985) showed that these complementary therapies seemed to complement rather than compete with conventional medical care, as therapists reported that approximately a third of their patients were seeking conventional medical help at the same time for the same condition. A number of other studies have since confirmed this pattern (Daphne, 1997; Sukdev, 1997; Tovey, Easthope and Adams, 2003; Singh, Raidoo and Harries, 2004).

Fulder and Munro (1985) also suggest that, in some respects, the consultations of complementary practitioners can be considered as similar to those of a specialist, as both professionals appear to be sought as a second resort while the general practitioner is seen as the first port of call. This is confirmed by Swayne (1989), who analyzed 7218 consecutive consultations during a one-week period by 73 doctors who made use of homoeopathy in their practices.

2.4.3 In Asia

A study in Perak, Malaysia, assessed the knowledge and practice of 40 doctors in 16 health clinics, toward complementary medicine (Ismail and Chan, 2004). A questionnaire was distributed and 34 doctors (85%) responded. 59% used some form of complementary medicine and 67% had encouraged patients to seek complementary medicine. 88% were in favour of a hospital based complementary medicine referral centre. 6% were trained in complementary medicine.
2.4.4 In South Africa

A study entitled "Attitudes of physicians toward traditional healing, faith healing and alternative medicine in rural South Africa" was conducted in 2001 (Peltzer, 2001). The definition of alternative medicine for this study included acupuncture, aromatherapy, chiropractic, herbal medicine, homoeopathy and reflexology. The survey was conducted on 242 registered physicians in the Northern Province and Mpumalanga, South Africa. There were 105 responses. The results indicated that the likelihood of referral to a non-biomedical practitioner was highest for an alternative therapist. It was also found that alternative medicine was ranked as most important among physicians, followed by faith healing and traditional healing in that order.

Sukdev conducted a study in 1997 entitled, "The perception of medical practitioners with regards to complementary medicine in health care in South Africa." 1000 questionnaires were sent to medical practitioners working in the central urban areas of Johannesburg, Cape Town, Durban, Bloemfontein, East London and Port Elizabeth. A response rate of 32.2% was obtained. 28.26% of respondents incorporated complementary medicine into their practice. Of these, 13.59% used homoeopathy in their practices. Of the practitioners who did not incorporate complementary medicine in their practices, the majority (52.48%) indicated that it was because they lacked the knowledge in complementary medicine. 39.75% of respondents agreed that complementary medicine played an active role in the health care system in South Africa. 47.83% of respondents agreed that complementary medicine should be included into the syllabus for
undergraduates in the medical profession. The majority of practitioners (77.01%) indicated that they viewed complementary medicine as supportive therapy. This is similar to the view held by pharmacists in the study conducted by Daphne in 1997 (the majority of pharmacists (82.5%) regarded complementary medicine as supportive therapy – see 2.3.2).

2.5 **Homoeopathic registration requirements and training in South Africa**

Homoeopathic practitioners are recognized as primary contact professionals (the same as medical practitioners). Therefore, only full-time training at the level of a Masters Degree in Homoeopathy is allowed or recognized. Registration with the Allied Health Professions Council of SA (AHPCSA) is a statutory requirement (Homoeopathic Association of S.A.)

The only training recognized for registration in South Africa is the Masters Degree in Homoeopathy – (M.Tech. (Hom)) offered at the Durban Institute of Technology and University of Johannesburg, or SA Qualifications Standards Authority (SAQA) and AHPCSA approved equivalent. The M.Tech (Hom) consists of a five-year full-time medico-scientific course in Homoeopathy. Medical practitioners registered with the Health Professions Council of SA (HPCSA) may also opt for the course offered by the SA Faculty of Homoeopathy. It should be noted that, whereas the vast majority of international homoeopathic schools offer skills-oriented homoeopathic training, South Africa offers professional training at a level required for the practicing of homoeopathy as a Primary Contact Health Profession. This
being the case, distance education, correspondence and part-time courses, from whatever institution in the world, are not recognized for purposes of registration (Homoeopathic Association of S.A.)\(^2\). See Appendix C for the M.Tech (Hom) curriculum.

The homoeopathic training course in South Africa is currently undergoing changes due to re-curriculation, in an attempt to deliver an even higher standard of training. The Department of Education in South Africa requires periodic re-curriculation for all courses in tertiary education.
2.6 Summary

From the literature discussed above, it appears that homoeopathy is seen mainly as a supplement to, rather than a replacement of conventional treatment.

As the literature shows, interest in complementary therapies, including homoeopathy, has increased (Thomas, 2003; Jonas, Kaptchuk and Linde, 2003; Singh, Raidoo and Harries, 2004; Manchand and Kulashreshtha, 2005). It would be valuable to assess the current perceptions of conventional medical practitioners towards homoeopathy.

No previous research in this country has attempted to address perceptions regarding how homoeopaths are trained. This study does this, specifically regarding the perceived level of skill that homoeopaths possess, and the awareness of the nature of homoeopathic training in South Africa. (See Appendix B - Part two: Questions 5, 6, 7 and Part four: Question 11).

Considering that homoeopathy may be incorporated into the Public Health System in the future, it is necessary to investigate professional opinions towards homoeopathy in order to facilitate smooth integration.
CHAPTER 3

MATERIALS AND METHODS

3.1 Study design

A survey method was employed to investigate the perceptions of homoeopathy of general practitioners and pharmacists.

A survey is used when large numbers of respondents are required, when questions are relatively simple and easy to respond to, and when the study does not require detailed clarification or exploration of responses. Questionnaires can be useful tools for finding out about choices, beliefs and attitudes in healthcare (Richardson, 2005).

A postal questionnaire (Appendix B) was utilized to collect data. The questionnaire was modified from the questionnaire used by Smink and Langworthy (2000) in their research entitled “Chiropractic through the eyes of physiotherapists, manual therapists and osteopaths in The Netherlands.” The objectives of their study were to identify current perceptions and levels of awareness of chiropractic among the professionals included in the survey. In addition, they investigated how future communication and inter-professional collaboration between the four professions may be improved in the interests of patient care as perceived by these groups. For these reasons, the questionnaire by Smink and Langworthy was found to adequately cover the objectives of this study. 494 questionnaires were distributed to 100 manual therapists, 299 physiotherapists and 95 osteopaths across the
Netherlands. Questionnaires were identical for each profession. An overall response rate of 48% was achieved.

Following modification of Smink and Langworthy's questionnaire, a pilot study was conducted to ensure validity and reliability. Thereafter, questionnaires were distributed via the South African postal service.

3.2 **Study population**

The questionnaire was posted to general practitioners and pharmacists in the greater Durban area of Kwazulu Natal including Central Durban, Durban South, Durban North, Innerwest and Outerwest.

3.2.1 **Inclusion criteria for general practitioners**

Only practicing general practitioners, in private practice, listed in the medical pages of the Durban Telephone Directory (October 2003/2004) were included.

3.2.2 **Exclusion criteria for general practitioners**

- Any general practitioners that were not listed in the medical pages of the Durban Telephone Directory (October 2003/2004)
- Non-practicing general practitioners
- General practitioners who were not in private practice

3.2.3 **Inclusion criteria for pharmacists**

Only practicing pharmacists that were listed in the Durban Yellow Pages (October 2003/2004) were included.
3.2.4 Exclusion criteria for pharmacists

- Pharmacists that were not listed in the Durban Yellow Pages (October 2003/2004)
- Non-practicing pharmacists

3.3 Study sample

A sample size of 370 general practitioners and 114 pharmacists was used. The sample was extracted directly from the medical pages of the Durban Telephone Directory (October 2003/2004) and the Durban Yellow Pages (October 2003/2004) respectively, regardless of sex, race, or age. The sample size represented all GPs and pharmacists that were listed, and that fitted the criteria for inclusion.

3.4 Ethics

The answers to each questionnaire were regarded as strictly confidential. In order to encourage honest responses anonymity was maintained in the following manner:

- Respondents were not asked to supply their names, addresses or other information that would have allowed identification.
- There was therefore no way of identifying respondents from their returned questionnaires.
3.5 Methodology

3.5.1 Pilot study

A pilot study was conducted prior to distribution of questionnaires, to determine the face validity of the questionnaire. The questionnaire was tested on 5 general practitioners and 5 pharmacists chosen from those listed in the medical pages of the Durban Telephone Directory and from the Durban Yellow Pages respectively. No errors were found during the pilot study. The results from the pilot study were disregarded, and participants of the pilot study were excluded from the main study.

3.5.2 Postage of questionnaires

The questionnaires were then posted to all included in the sample group.

3.5.3 Re-postage of questionnaires

For greater compliance, a second set of questionnaires was posted to all initial recipients, 2 weeks after the first set of questionnaires was posted. As it was not possible to identify respondents, all general practitioners and pharmacists included in the sample group received a second questionnaire. Included with the second questionnaire was a note that requested the recipient to ignore the questionnaire if he/she had already responded.

Questionnaires were returned via the postage system at no cost to respondents, since self-addressed, stamped envelopes were provided. A cut-off date of 8 weeks after the initial set of questionnaires was posted, was set. Only questionnaires received within 8 weeks were included in the research.
3.5.4 **Data capture**

After all questionnaires were received, the data was edited, encoded and categorized for capture on disc.

3.5.5 **Data analysis:**

Results were analyzed by utilizing the SPSS program (Version 12.1 for Windows).

Procedure 1: Descriptive statistics were used in the form of bar charts and frequency tables.

Procedure 2: The Pearson’s Chi-square test was used to test the association between various combinations of variables at the 5% level of significance.

The Pearson’s Chi-square test is one of a variety of statistical procedures whose results are evaluated by reference to the Chi-square distribution. It tests a null hypothesis that the relative frequencies of occurrence of observed events follow a specified frequency distribution. The Chi-square is calculated by finding the difference between each observed and theoretical frequency, squaring them, dividing each by the theoretical frequency, and taking the sum of the results.  

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4. This reference is not present in the given text but is implied in the explanation of the Chi-square test.
3.5.6 Hypotheses tests

The following hypotheses were tested:

3.5.6.1 The association between the age group of GPs and their perception of the skill of homoeopaths

\[ H_0 = \text{Age group of GPs and perception of skill of homoeopaths are independent.} \]

\[ H_1 = \text{Age group of GPs and perception of skill of homoeopaths are dependent.} \]

3.5.6.2 The association between the age group of pharmacists and their perception of the skill of homoeopaths

\[ H_0 = \text{Age group of pharmacists and perception of skill of homoeopaths are independent.} \]

\[ H_1 = \text{Age group of pharmacists and perception of skill of homoeopaths are dependent.} \]

3.5.6.3 The association between the age group of GPs and their perception of improved communication and co-operation between practitioners, being beneficial to patients

\[ H_0 = \text{Age group of GPs and perception of improved communication and co-operation being beneficial to patients are independent.} \]

\[ H_1 = \text{Age group of GPs and perception of improved communication and co-operation being beneficial to patients are dependent.} \]
3.5.6.4 The association between the age group of pharmacists and their perception of improved communication and co-operation between practitioners, being beneficial to patients

H₀ = Age group of pharmacists and perception of improved communication and co-operation being beneficial to patients are independent.
H₁ = Age group of pharmacists and perception of improved communication and co-operation being beneficial to patients are dependent.

3.5.6.5 The association between gender of GPs and their overall perception of homoeopathy

H₀ = Gender of GPs and overall perception of homoeopathy are independent.
H₁ = Gender of GPs and overall perception of homoeopathy are dependent.

3.5.6.6 The association between gender of pharmacists and their overall perception of homoeopathy

H₀ = Gender of pharmacists and overall perception of homoeopathy are independent.
H₁ = Gender of pharmacists and overall perception of homoeopathy are dependent.
3.5.6.7 The association between duration of practice of GPs and their perception of the skill of homoeopaths

$H_0 = $ Duration of practice of GPs and perception of skill of homoeopaths are independent.

$H_1 = $ Duration of practice of GPs and perception of skill of homoeopaths are dependent.

3.5.6.8 The association between duration of practice of pharmacists and their perception of the skill of homoeopaths

$H_0 = $ Duration of practice of pharmacists and perception of skill of homoeopaths are independent.

$H_1 = $ Duration of practice of pharmacists and perception of skill of homoeopaths are dependent.

3.5.6.9 The association between duration of practice of GPs and their overall perception of homoeopathy

$H_0 = $ Duration of practice of GPs and overall perception of homoeopathy are independent.

$H_1 = $ Duration of practice of GPs and overall perception of homoeopathy are dependent.
3.5.6.10 The association between duration of practice of pharmacists and their overall perception of homoeopathy

$H_0 =$ Duration of practice of pharmacists and overall perception of homoeopathy are independent.

$H_1 =$ Duration of practice of pharmacists and overall perception of homoeopathy are dependent.

3.5.7 Decision rule

At $\alpha = 0.05$ level of significance, the null hypothesis is rejected if $P < \alpha$ where $P$ is the observed significance level or probability value. Otherwise the null hypothesis is accepted at the same level of significance.

If $P < 0.05$ reject $H_0$

If $P \geq 0.05$ accept $H_0$
3.6 Materials

See appendices for copies of the following documents:

Appendix A – Information letter
Appendix B – Questionnaire
Appendix C – M.Tech (Hom) curriculum
CHAPTER FOUR

RESULTS

Questionnaires were posted to 370 general practitioners (GPs) and 114 pharmacists. A total of 484 questionnaires were distributed and a total of 155 responses were received. The response rate was 32.02%. Of the 155 responses, 97 (62.6%) were general practitioners and 58 (37.4%) were pharmacists. See Figure 4.1. The response rate for general practitioners was 26.22% and the response rate for pharmacists was 50.87%.

Figure 4.1 Percentage of participants per discipline
4.1 **Demographic data**

(Re: Part one of Questionnaire. See APPENDIX B)

4.1.1 **Gender distribution**

As can be seen from Figure 4.2, 33 pharmacists (56.9%) who responded were male, and 25 (43.1%) were female.

As can be seen from Figure 4.3, a large majority of GPs that responded were male, i.e. 83 (85.57%), while only 14 (14.43%) were female.

![Figure 4.2 Gender distribution: Pharmacists](image)

![Figure 4.3 Gender distribution: General Practitioners](image)
4.1.2 Age Distribution

Most pharmacists belonged to the 26-35 year age group (43.1%) and the 36-45 year age group (25.9%). See Figure 4.4.

Most GPs belonged to the 46-55 year age group (35.1%) and the 36-45 year age group (28.9%). See Figure 4.5.
4.1.3 Distribution by general area

For both pharmacists and GPs, most responses were received from the Central Durban area i.e. 48.3% and 50.5% respectively. This is most likely due to a greater density of pharmacies and general practitioners based in the city. See Figure 4.6.

Figure 4.6 Distribution by general area
4.1.4 Distribution by Suburb

In the pharmacist sub-group, most responses were received from the suburbs of Chatsworth and Queensburgh (10.5% each). The City and Pinetown each contributed 8.8% of responses. The fewest responses were received from Phoenix, Umlazi, Isipingo, Amanzimtoti and Kloof (1.8% each). See Figure 4.7.

In the GP sub-group, most responses were received from the City, Chatsworth and Phoenix. A high percentage of questionnaires were also received from the suburbs of Amanzimtoti, Reservoir Hills and Hillcrest. See Figure 4.8.

![Figure 4.7 Distribution by suburb: Pharmacists]
4.1.5 Duration of practice

Most pharmacists who responded had been practicing for 11-15 years (24.1%) and for 6-10 years (22.4%). 19% of pharmacists had been practicing for more than 30 years and 17.2% for 21-30 years.

Most GPs who responded had been practicing for 21-30 years (27.1%) and for 16-20 years (25%). 21.9% of GPs had been practicing for 11-15 years.

See Figure 4.9.

These results indicate that the majority of responses were received from more experienced general practitioners and pharmacists.
Figure 4.9. Duration of practice
4.2 General knowledge of homoeopathy

(Re: Part Two of Questionnaire. See APPENDIX B)

4.2.1 Knowledge of homoeopathy (re: Question 1)

Figure 4.10 indicates that most pharmacists (68.42%) and GPs (57.73%) have some knowledge of homoeopathy, and that 21.05% of pharmacists and 13.4% of GPs were quite familiar with it. A small percentage of pharmacists (1.75%) and GPs (3.09%) had never heard of homoeopathy.
4.2.2 Legal recognition of homoeopathy (re: Question 2)

The majority of respondents (86.21% of pharmacists and 74.23% of GPs) perceive that South African law recognizes homoeopathy. Only a small percentage perceives that homoeopathy is not legally recognized (5.15% of pharmacists and 1.72% of GPs). See Figure 4.11 below.
4.2.3 Funding by health care insurers (re: Question 3)

As is evident in Figure 4.12, many pharmacists and GPs perceived that homoeopathy was funded by health care insurers (55.17% and 41.67% respectively). However, it is also evident that a significant number were unsure if homoeopathy was funded by health care insurers (29.31% of pharmacists and 37.5% of GPs). Also, 15.52% of pharmacists and 20.83% of GPs perceived that homoeopathy was not funded by health care insurers.

![Figure 4.12 Funding by health care insurers]
4.2.4 Training courses (re: Question 4)

87.9% of pharmacists and 84.5% of GPs perceived that training courses for homoeopathy exist in South Africa.

4.2.5 Duration of training course (re: Question 5)

Figure 4.13 gives a breakdown of the perceived number of years required to qualify as a homoeopath. Only 26.79% of pharmacists and 21.98% of GPs believe that homoeopathic training involves 5 years of study. Most of the pharmacists in this study perceived that the homoeopathic course in South Africa is of 3 years duration while most of the GPs perceived that the course is of 4 years duration. A number of pharmacists and GPs perceived that the course was longer than 5 years in duration, suggesting some recognition of the in-depth nature of homoeopathic training.

![Figure 4.13 Duration of training course](chart.png)
4.2.6 Level of education (re: Question 6)

A substantial majority of GPs and pharmacists perceived that homoeopaths receive a diploma on qualification (63.04% of GPs and 49.12% of pharmacists). Very few respondents knew that homoeopaths receive a Master’s degree in South Africa (17.54% of pharmacists and 4.35% of GPs). See Figure 4.14.

![Figure 4.14 Level of education](image-url)
4.2.7 Work experience (re: Question 7)

A high number of both GPs and pharmacists perceived that homoeopaths are required to undergo work-experience training (67.24% of pharmacists and 64.68% of GPs). An average of 31.14% of GPs and pharmacists were unsure, and a small percentage perceived that work experience was not a requirement. See Figure 4.15.

![Figure 4.15 Work experience](chart.png)
4.2.8 Awareness of homoeopathic training institutions in South Africa
(re: Question 8)

The majority of pharmacists (74.14%) and GPs (75.26%) were aware of the homoeopathic training institutions in Durban and Witwatersrand. See Figure 4.16

Figure 4.16 Awareness of homoeopathic training institutions
4.2.9 Awareness of Homoeopathic Day Clinic at the Durban Institute of Technology (Re: Question 9)

Almost half of the pharmacists who responded were unaware of the Homoeopathic Day Clinic (48.28%) while half of the GPs (50.52%) were aware of the clinic. See Figure 4.17.

Figure 4.17 Awareness of Homoeopathic Day Clinic
4.3 Perception of homoeopathy

(Re: Part three of questionnaire. See APPENDIX B)

4.3.1 Scientific basis (re: Question 1)

Most GPs and a substantial number of pharmacists perceived that homoeopathy has a scientific basis. A substantial number of GPs (27.84%) and pharmacists (31.58%) were unsure in this regard. See Figure 4.18.

Figure 4.18 Scientific basis
4.3.2 Legitimacy of homoeopathy as a form of medicine (re: Question 2)

An average of 65.75% of all respondents perceived that homoeopathy is a legitimate form of medicine. An average 19.28% of all respondents were unsure, and 13.6% of all respondents perceived that homoeopathy is not a legitimate form of medicine. Figure 4.19 indicates similar perceptions between both groups. 1.03% of pharmacists and 1.72% of GPs did not answer the question.

![Figure 4.19 Legitimacy of homoeopathy as a form of medicine](image-url)
4.3.3 Type of modality (re: Question 3)

Participants were asked the question: “Which do you consider homoeopathic medicine to be?” Most pharmacists responded that homoeopathy was natural medicine (55.17%), while 48.96% of GPs shared that perception. 12.07% of pharmacists and 17.71% of GPs perceived that homoeopathic medicine was placebo. See figure 4.20.

![Figure 4.20 Type of modality](image-url)
4.3.4 Procedures conducted by a homoeopath (re: Question 4)

Table 4.1 below reflects the number of pharmacists and GPs who perceived that homoeopaths perform the procedures listed.

Table 4.1 Procedures performed by a homoeopath

<table>
<thead>
<tr>
<th>PROCEDURE</th>
<th>Number of GPs</th>
<th>Percentage of GPs</th>
<th>Number of Pharmacists</th>
<th>Percentage of Pharmacists</th>
</tr>
</thead>
<tbody>
<tr>
<td>Check vital signs</td>
<td>81</td>
<td>84.4</td>
<td>50</td>
<td>92.6</td>
</tr>
<tr>
<td>Cardiovascular examination</td>
<td>69</td>
<td>71.9</td>
<td>26</td>
<td>48.1</td>
</tr>
<tr>
<td>Respiratory examination</td>
<td>67</td>
<td>69.8</td>
<td>31</td>
<td>57.4</td>
</tr>
<tr>
<td>Neurological examination</td>
<td>66</td>
<td>68.8</td>
<td>24</td>
<td>44.4</td>
</tr>
<tr>
<td>Abdominal examination</td>
<td>67</td>
<td>69.8</td>
<td>30</td>
<td>55.6</td>
</tr>
<tr>
<td>Musculoskeletal examination</td>
<td>66</td>
<td>68.8</td>
<td>27</td>
<td>50</td>
</tr>
<tr>
<td>Genitourinary examination</td>
<td>68</td>
<td>70.8</td>
<td>26</td>
<td>48.1</td>
</tr>
<tr>
<td>Take a past medical history</td>
<td>87</td>
<td>90.6</td>
<td>53</td>
<td>98.1</td>
</tr>
<tr>
<td>Take a family history</td>
<td>87</td>
<td>90.6</td>
<td>48</td>
<td>88.9</td>
</tr>
<tr>
<td>Take a social history</td>
<td>86</td>
<td>89.6</td>
<td>44</td>
<td>81.5</td>
</tr>
<tr>
<td>Take a radiological history</td>
<td>64</td>
<td>66.7</td>
<td>19</td>
<td>35.2</td>
</tr>
<tr>
<td>Auscultation</td>
<td>63</td>
<td>65.6</td>
<td>19</td>
<td>35.2</td>
</tr>
<tr>
<td>Laboratory tests</td>
<td>63</td>
<td>65.6</td>
<td>22</td>
<td>40.7</td>
</tr>
<tr>
<td>None of the above</td>
<td>8</td>
<td>8.3</td>
<td>55</td>
<td>56.7</td>
</tr>
<tr>
<td>All of the above</td>
<td>35</td>
<td>60.4</td>
<td>18</td>
<td>32.7</td>
</tr>
</tbody>
</table>

The vast majority of both GPs and pharmacists perceived that homoeopaths check vital signs of patients: see Figure 4.21. Most GPs perceived that homoeopaths did perform cardiovascular examinations on their patients (71.88%), while most pharmacists (51.85%) perceived that homoeopaths did not perform cardiovascular examinations. Almost all pharmacists (98.15%) and GPs (90.62%) perceived that homoeopaths take a past medical history from their patients: see Figure 4.22.
The majority of pharmacists and GPs perceived that homoeopaths take a family history of their patients: see Figure 4.23. Most pharmacists and GPs perceived that homoeopaths take a social history of their patients: see Figure 4.24.

![Figure 4.21 Vital signs](image1)

![Figure 4.22 Past medical history](image2)
Figure 4.23 Family history

Family history

Pharmacists  GPs

88.89  90.62
11.11  9.38

Figure 4.24 Social history

Social history

Pharmacists  GPs

81.48  89.58
18.52  10.42
4.3.5. Benefit of homoeopathic treatment for various conditions (re: Question 5)

Table 4.2 below reflects the number of pharmacists and GPs who perceived that homoeopathy is useful in the treatment of the conditions listed.

Table 4.2 Benefit of homoeopathy for various conditions

<table>
<thead>
<tr>
<th>CONDITION</th>
<th>Number of GPs</th>
<th>Percentage of GPs</th>
<th>Number of Pharmacists</th>
<th>Percentage of Pharmacists</th>
</tr>
</thead>
<tbody>
<tr>
<td>Any disease or disorder</td>
<td>45</td>
<td>48,9</td>
<td>24</td>
<td>42,9</td>
</tr>
<tr>
<td>Headache</td>
<td>66</td>
<td>71,0</td>
<td>48</td>
<td>85,7</td>
</tr>
<tr>
<td>Mechanical injury</td>
<td>53</td>
<td>57</td>
<td>33</td>
<td>58,9</td>
</tr>
<tr>
<td>Inflammatory disease</td>
<td>64</td>
<td>68,8</td>
<td>40</td>
<td>71,4</td>
</tr>
<tr>
<td>Viral and Bacterial disease</td>
<td>51</td>
<td>54,8</td>
<td>34</td>
<td>60,7</td>
</tr>
<tr>
<td>Autoimmune disease</td>
<td>57</td>
<td>61,3</td>
<td>31</td>
<td>55,4</td>
</tr>
<tr>
<td>Psychosomatic disease</td>
<td>84</td>
<td>90,3</td>
<td>34</td>
<td>60,7</td>
</tr>
<tr>
<td>Psychological disease</td>
<td>68</td>
<td>73,1</td>
<td>34</td>
<td>60,7</td>
</tr>
<tr>
<td>Neurological disease</td>
<td>49</td>
<td>52,7</td>
<td>26</td>
<td>46,4</td>
</tr>
<tr>
<td>Cancer</td>
<td>47</td>
<td>50,5</td>
<td>25</td>
<td>44,6</td>
</tr>
<tr>
<td>None</td>
<td>7</td>
<td>7,5</td>
<td>3</td>
<td>5,4</td>
</tr>
</tbody>
</table>

Most respondents felt that homoeopathy was effective for treatment of headaches, mechanical injury, inflammatory disease, viral and bacterial disease, autoimmune disease, psychosomatic disease and psychological disease.

4.3.6 Duration of homoeopathic consultation (re: Question 6)

Table 4.3 Duration of homoeopathic consultation

<table>
<thead>
<tr>
<th>TIME</th>
<th>NUMBER OF PHARMACISTS</th>
<th>NUMBER OF GENERAL PRACTITIONERS</th>
</tr>
</thead>
<tbody>
<tr>
<td>10 minutes</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>20 minutes</td>
<td>14</td>
<td>32</td>
</tr>
<tr>
<td>30 minutes</td>
<td>21</td>
<td>34</td>
</tr>
<tr>
<td>40 minutes</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>1 hour</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>1 ½ hours</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>2 hours</td>
<td>0</td>
<td>1</td>
</tr>
</tbody>
</table>
4.4 Communication

(Re: Part four of Questionnaire. See APPENDIX B)

4.4.1 Quality of communication between GPs/Pharmacists and Homoeopaths

(Re: Question 1)

Most GPs (56.7%) perceived that communication was poor. A substantial number of pharmacists (48.28%) perceived that communication was non-existent. See Figure 4.25.

Figure 4.25 Level of communication
4.4.2 Level of co-operation between GPs/Pharmacists and Homoeopaths

(Re: Question 2)

Most GPs (57.73%) perceived that co-operation was poor, while most pharmacists (48.28%) perceived that co-operation was non-existent. See Figure 4.26.

![Figure 4.26 Level of co-operation](image-url)
4.4.3 Benefit of improved communication and co-operation

(Re: Question 3)

Participants were asked whether they perceived that improved communication and co-operation between GPs/pharmacists and homoeopaths would be beneficial to patients. 47 pharmacists and 79 GPs agreed that improved communication and co-operation would be beneficial. This equates to an average of 81.2% of all respondents holding this belief.

4.4.3.1 The relationship between the age group of GPs and their perception of improved communication and co-operation between practitioners being beneficial to patients

The Pearson’s Chi-square Test was used to test the relevant hypothesis (see 3.5.6.3). Table 4.4 looks at the age group of GPs cross-tabulated against their perception of whether improved communication and co-operation would be beneficial to patients.

Table 4.5 shows that the test gives a P-value = .746 ≥ .05. Therefore it has been established that there is no association between the two characteristics.
Table 4.4 Cross-tabulation: Age group of GPs and benefit of communication and co-operation to patients

<table>
<thead>
<tr>
<th>Age group * Benefit to patients Cross-tabulation</th>
<th>Benefit to patients</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age group</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Count</td>
<td>6</td>
<td>1</td>
</tr>
<tr>
<td>% Within Age group</td>
<td>85.7%</td>
<td>14.3%</td>
</tr>
<tr>
<td>26-35 yrs</td>
<td>23</td>
<td>2</td>
</tr>
<tr>
<td>% Within Age group</td>
<td>82.1%</td>
<td>7.1%</td>
</tr>
<tr>
<td>36-45 yrs</td>
<td>27</td>
<td>2</td>
</tr>
<tr>
<td>% Within Age group</td>
<td>79.4%</td>
<td>5.9%</td>
</tr>
<tr>
<td>56-65 yrs</td>
<td>18</td>
<td>0</td>
</tr>
<tr>
<td>% Within Age group</td>
<td>85.7%</td>
<td>.0%</td>
</tr>
<tr>
<td>More than 65 yrs</td>
<td>74</td>
<td>5</td>
</tr>
<tr>
<td>% Within Age group</td>
<td>82.2%</td>
<td>5.6%</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 4.5 Chi-square Test 1

<table>
<thead>
<tr>
<th>Chi-Square Test</th>
<th>Value</th>
<th>df</th>
<th>Asymp. Sig. (2-sided)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Chi-Square</td>
<td>3.487(a)</td>
<td>6</td>
<td>.746</td>
</tr>
<tr>
<td>Likelihood Ratio</td>
<td>5.193</td>
<td>6</td>
<td>.519</td>
</tr>
<tr>
<td>Linear-by-Linear Association</td>
<td>.160</td>
<td>1</td>
<td>.689</td>
</tr>
<tr>
<td>N of Valid Cases</td>
<td>90</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a 8 cells (66.7%) have expected count less than 5. The minimum expected count is .39.

56
4.4.3.2 The relationship between the age group of pharmacists and their perception of improved communication and co-operation between practitioners being beneficial to patients.

The Pearson’s Chi-square Test was used to test the relevant hypothesis (see 3.5.6.4). Table 4.6 looks at the age group of pharmacists cross-tabulated against their perception of whether improved communication and co-operation would be beneficial to patients.

Table 4.6 Cross-tabulation: Age group of pharmacists and benefit of communication and co-operation to patients

<table>
<thead>
<tr>
<th>Age group</th>
<th>Benefit to patients</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>26-35 yrs</td>
<td>6</td>
<td>1</td>
</tr>
<tr>
<td>36-45 yrs</td>
<td>23</td>
<td>2</td>
</tr>
<tr>
<td>46-55 yrs</td>
<td>27</td>
<td>2</td>
</tr>
<tr>
<td>56-65 yrs</td>
<td>18</td>
<td>0</td>
</tr>
<tr>
<td>Greater than 65 yrs</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>Total</td>
<td>79</td>
<td>6</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Benefit to patients</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>81.4%</td>
</tr>
<tr>
<td>No</td>
<td>6.2%</td>
</tr>
<tr>
<td>Unsure</td>
<td>12.4%</td>
</tr>
</tbody>
</table>

The total perception of benefit to patients is 81.4%, with 6.2% unsure and 12.4% not beneficial.

57
Table 4.7 shows that the test gives a P-value = .842 \geq .05. Therefore it has been established that there is no association between the two characteristics.

Table 4.7 Chi-square Test 2

<table>
<thead>
<tr>
<th></th>
<th>Value</th>
<th>df</th>
<th>Asymp. Sig. (2-sided)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Chi-Square</td>
<td>4.159(a)</td>
<td>8</td>
<td>.842</td>
</tr>
<tr>
<td>Likelihood Ratio</td>
<td>5.911</td>
<td>8</td>
<td>.657</td>
</tr>
<tr>
<td>Linear-by-Linear Association</td>
<td>.356</td>
<td>1</td>
<td>.551</td>
</tr>
<tr>
<td>N of Valid Cases</td>
<td></td>
<td>97</td>
<td></td>
</tr>
</tbody>
</table>

a 10 cells (66.7%) have expected count less than 5. The minimum expected count is .43.

4.4.4 Referrals between practitioners

(Re: Questions 4-7)

60.3% of pharmacists and 63.9% of GPs had never referred a patient to a homoeopath. 68.4% of pharmacists and 63.9% of GPs had never had a patient referred to them by a homoeopath. Most pharmacists (79.3%) and GPs (81.3%) would give feedback on a referred patient to a homoeopath. Most pharmacists (82.8%) and GPs (87.5%) would like feedback on a referred patient from a homoeopath.
4.4.5 Unresolved cases (re: Questions 8 and 9)

4.4.5.1 Unresolved cases after referral to a Homoeopath (i.e. following homoeopathic treatment) (re: Question 8)

Table 4.8 below indicates the action that pharmacists and GPs expect a homoeopath to take if a case remained unresolved following homoeopathic treatment. Most pharmacists expect a homoeopath to refer the patient to a specialist, while most GPs expect a homoeopath to refer the patient back to them.

Table 4.8 Unresolved cases following homoeopathic treatment

<table>
<thead>
<tr>
<th>ACTION</th>
<th>Number of Pharmacists</th>
<th>Percentage of Pharmacists</th>
<th>Number of GPs</th>
<th>Percentage of GPs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Refer patient back</td>
<td>3</td>
<td>5.4</td>
<td>52</td>
<td>57.1</td>
</tr>
<tr>
<td>Refer to specialist</td>
<td>34</td>
<td>60.7</td>
<td>4</td>
<td>4.4</td>
</tr>
<tr>
<td>Decide on action together</td>
<td>19</td>
<td>33.9</td>
<td>35</td>
<td>38.5</td>
</tr>
</tbody>
</table>
4.4.5.2 Unresolved cases after referral from a homoeopath (i.e. following treatment by GP/Pharmacist) (re: Question 9)

Table 4.9 indicates the action that a GP/Pharmacist would take if a homoeopath referred a patient to them (the GP/Pharmacist), and the case remained unresolved following their treatment.

Table 4.9 Unresolved cases following treatment from a pharmacist/GP

<table>
<thead>
<tr>
<th>ACTION</th>
<th>Number of Pharmacists</th>
<th>Percentage of Pharmacists</th>
<th>Number of GPs</th>
<th>Percentage of GPs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Refer patient back</td>
<td>1</td>
<td>1.8</td>
<td>7</td>
<td>7.4</td>
</tr>
<tr>
<td>Refer to specialist</td>
<td>37</td>
<td>64.9</td>
<td>42</td>
<td>44.7</td>
</tr>
<tr>
<td>Decide on action together</td>
<td>19</td>
<td>33.3</td>
<td>45</td>
<td>47.9</td>
</tr>
</tbody>
</table>
4.4.6.1 Benefit of co-operation between GPs/Pharmacists and Homoeopaths

(Re: Question 10)

Most pharmacists (68.4%) and GPs (79.7%) felt that co-operation would be beneficial to all parties involved.

See figure 4.27 and Figure 4.28.

Figure 4.27 Benefit of co-operation: Pharmacists

Figure 4.28 Benefit of co-operation: General Practitioners
4.4.6.2 Reasons
(Re: Question 10)

Respondents were asked why they thought that improved co-operation between GPs/pharmacists and homoeopaths would be beneficial.

(i) Pharmacists

Only 30 pharmacists answered this question (i.e. 51.72% of all pharmacists who returned the questionnaire).

Three different reasons were given. These are listed below:

1. *Shared knowledge leads to all parties learning more about health.* 9 pharmacists held this view. This equates to 30% of those who answered the question.

2. *Holistic treatment of the patient will be achieved.* 19 pharmacists held this view. (63.33% of those who answered the question.)

3. *Each modality has its own benefits and therefore deserves its place in health care.* 2 pharmacists held this view. (6.67% of those who answered the question.)

Most pharmacists who answered the question feel that improved co-operation between practitioners will ultimately be the best for the patient as the patient will have holistic treatment, and more aspects of their disease will be covered.
Five different reasons were given. These are listed below:

1. *Holistic treatment of the patient will be achieved.* 19 GPs held this view. This equates to 55.9% of the GPs who answered the question.

2. *Shared knowledge leads to all parties learning more about health.* 10 GPs held this view. (29.4% of the GPs who answered the question).

3. *Each modality has its own benefits and therefore deserves its place in health care.* 3 GPs held this view. (8.8% of the GPs who answered the question).

4. *All practitioners will benefit financially.* 1 GP held this view (2.9% of those who answered the question).

5. *The patient can be more involved in decision-making and would be free to choose whom he/she would like to consult with.* 1 GP held this view (2.9% of the GPs who answered the question).

More than half the GPs who answered the question felt that improved co-operation between practitioners will ultimately be the best for the patient as the patient will have holistic treatment, and more aspects of their disease will be covered.
An average of 59.66% of respondents who answered the question (63.33% of pharmacists and 55.9% of GPs) therefore hold the same view that holistic treatment from all three types of practitioners (pharmacists, GPs and homoeopaths) would ultimately have the greatest benefit for the patient.

4.4.7 Skill of homoeopaths (re: Question 11)

A significant number of GPs were unsure if homoeopaths are skilled practitioners (39.2%), and many pharmacists perceived that homoeopaths are skilled practitioners (38.6%). See Figure 4.29.

![Figure 4.29 Skill of homoeopaths](image)
4.4.7.1 The relationship between the age group of GPs and their perception of the skill of homoeopaths

The Pearson’s Chi-square Test was used to test the relevant hypothesis (see 3.5.6.1). Table 4.10 looks at the age group of GPs cross-tabulated against their perception of the skill of homoeopaths.

Table 4.10 Cross-tabulation: Age group of GPs and perception of skill of homoeopaths

<table>
<thead>
<tr>
<th>Age group</th>
<th>Skilled</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
<td>No</td>
<td>Unsure</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>26-35 yrs</td>
<td>2</td>
<td>1</td>
<td>4</td>
<td></td>
<td></td>
<td>7</td>
</tr>
<tr>
<td>36-45 yrs</td>
<td>9</td>
<td>5</td>
<td>14</td>
<td></td>
<td></td>
<td>28</td>
</tr>
<tr>
<td>56-65 yrs</td>
<td>17</td>
<td>7</td>
<td>10</td>
<td></td>
<td></td>
<td>34</td>
</tr>
<tr>
<td>More than 65 yrs</td>
<td>5</td>
<td>8</td>
<td>8</td>
<td></td>
<td></td>
<td>21</td>
</tr>
<tr>
<td>Total</td>
<td>33</td>
<td>21</td>
<td>36</td>
<td></td>
<td></td>
<td>90</td>
</tr>
</tbody>
</table>

The Pearson’s Chi-square Test gives a P-value = .258 ≥ .05. Therefore it is established that there is no association between the age group of GPs and their perception of how skilled homoeopaths are. See Table 4.11.
Table 4.11 Chi-square test 3

Chi-Square Tests

<table>
<thead>
<tr>
<th></th>
<th>Value</th>
<th>df</th>
<th>Asymp. Sig. (2-sided)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Chi-Square</td>
<td>7.739(a)</td>
<td>6</td>
<td>.258</td>
</tr>
<tr>
<td>Likelihood Ratio</td>
<td>7.465</td>
<td>6</td>
<td>.280</td>
</tr>
<tr>
<td>Linear-by-Linear</td>
<td>.503</td>
<td>1</td>
<td>.478</td>
</tr>
<tr>
<td>Association</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>N of Valid Cases</td>
<td>90</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* 4 cells (33.3%) have expected count less than 5. The minimum expected count is 1.63.

4.4.7.2 The relationship between the age group of Pharmacists and their perception of the skill of homoeopaths

The Pearson's Chi-square Test was used to test the relevant hypothesis (see 3.5.6.2). Table 4.12 looks at the age group of pharmacists cross-tabulated against their perception of the skill of homoeopaths.

Table 4.12 Cross-tabulation: Age group of pharmacists and perception of skill of homoeopaths

<table>
<thead>
<tr>
<th>Age group</th>
<th>Count</th>
<th>Skilled</th>
<th>% Within Age group</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Yes</td>
<td>No</td>
<td>Unsure</td>
</tr>
<tr>
<td>26-35 yrs</td>
<td>7</td>
<td>2</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>% Within Age group</td>
<td>28.6%</td>
<td>14.3%</td>
<td>57.1%</td>
<td>100.0%</td>
</tr>
<tr>
<td>36-45 yrs</td>
<td>28</td>
<td>9</td>
<td>5</td>
<td>14</td>
</tr>
<tr>
<td>% Within Age group</td>
<td>32.1%</td>
<td>17.9%</td>
<td>50.0%</td>
<td>100.0%</td>
</tr>
<tr>
<td>46-55 yrs</td>
<td>34</td>
<td>17</td>
<td>7</td>
<td>10</td>
</tr>
<tr>
<td>% Within Age group</td>
<td>50.0%</td>
<td>20.6%</td>
<td>29.4%</td>
<td>100.0%</td>
</tr>
<tr>
<td>56-65 yrs</td>
<td>21</td>
<td>5</td>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td>% Within Age group</td>
<td>23.8%</td>
<td>38.1%</td>
<td>38.1%</td>
<td>100.0%</td>
</tr>
<tr>
<td>Greater than 65 yrs</td>
<td>7</td>
<td>2</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>% Within Age group</td>
<td>28.6%</td>
<td>42.9%</td>
<td>28.6%</td>
<td>100.0%</td>
</tr>
<tr>
<td>Total</td>
<td>97</td>
<td>35</td>
<td>24</td>
<td>38</td>
</tr>
<tr>
<td>% Within Age group</td>
<td>36.1%</td>
<td>24.7%</td>
<td>39.2%</td>
<td>100.0%</td>
</tr>
</tbody>
</table>
The Pearson's Chi-square Test gives a P-value = .341 ≥ .05. Therefore it is established that there is no association between the age group of pharmacists and their perception of how skilled homoeopaths are. See Table 4.13 below.

Table 4.13 Chi-square test 4

<table>
<thead>
<tr>
<th></th>
<th>Value</th>
<th>df</th>
<th>Asymp. Sig. (2-sided)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Chi-Square</td>
<td>9.015(a)</td>
<td>8</td>
<td>.341</td>
</tr>
<tr>
<td>Likelihood Ratio</td>
<td>8.663</td>
<td>8</td>
<td>.372</td>
</tr>
<tr>
<td>Linear-by-Linear Association</td>
<td>.421</td>
<td>1</td>
<td>.516</td>
</tr>
<tr>
<td>N of Valid Cases</td>
<td>97</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a 6 cells (40.0%) have expected count less than 5. The minimum expected count is 1.73.

4.4.7.3 The relationship between duration of practice of GPs and their perception of the skill of homoeopaths

The Pearson's Chi-square Test was used to test the relevant hypothesis (see 3.5.6.7). Table 4.14 looks at the cross-tabulation of duration of practice of GPs, against their perception of the skill of homoeopaths.
### Table 4.14 Cross-tabulation: Duration of practice of GPs and perception of skill of homoeopaths

<table>
<thead>
<tr>
<th>Duration of practice</th>
<th>Count</th>
<th>Skilled</th>
<th>No</th>
<th>Unsure</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 5 yrs</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>50.0%</td>
<td>.0%</td>
<td>50.0%</td>
<td>100.0%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2</td>
<td>2</td>
<td>4</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td></td>
<td>25.0%</td>
<td>25.0%</td>
<td>50.0%</td>
<td>100.0%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>8</td>
<td>4</td>
<td>9</td>
<td>21</td>
</tr>
<tr>
<td></td>
<td></td>
<td>38.1%</td>
<td>19.0%</td>
<td>42.9%</td>
<td>100.0%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>10</td>
<td>1</td>
<td>13</td>
<td>24</td>
</tr>
<tr>
<td></td>
<td></td>
<td>41.7%</td>
<td>4.2%</td>
<td>54.2%</td>
<td>100.0%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>9</td>
<td>10</td>
<td>7</td>
<td>26</td>
</tr>
<tr>
<td></td>
<td></td>
<td>34.6%</td>
<td>38.5%</td>
<td>26.9%</td>
<td>100.0%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>4</td>
<td>7</td>
<td>4</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td></td>
<td>26.7%</td>
<td>46.7%</td>
<td>26.7%</td>
<td>100.0%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>34</td>
<td>24</td>
<td>38</td>
<td>96</td>
</tr>
<tr>
<td></td>
<td></td>
<td>35.4%</td>
<td>25.0%</td>
<td>39.6%</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

The Pearson’s Chi-square Test gives a P-value = .174 ≥ .05. Therefore it is established that there is no association between the duration of practice of GPs and their perception of how skilled homoeopaths are. See Table 4.15 below.

### Table 4.15 Chi-square test 5

<table>
<thead>
<tr>
<th></th>
<th>Value</th>
<th>df</th>
<th>Asymp. Sig. (2-sided)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Chi-Square</td>
<td>13.972(a)</td>
<td>10</td>
<td>.174</td>
</tr>
<tr>
<td>Likelihood Ratio</td>
<td>15.992</td>
<td>10</td>
<td>.100</td>
</tr>
<tr>
<td>Linear-by-Linear Association</td>
<td>.485</td>
<td>1</td>
<td>.486</td>
</tr>
<tr>
<td>N of Valid Cases</td>
<td>96</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a 7 cells (38.9%) have expected count less than 5. The minimum expected count is .50.
4.4.7.4 The relationship between duration of practice of pharmacists and their perception of the skill of homoeopaths

The Pearson's Chi-square Test was used to test the relevant hypothesis (see 3.5.6.8). Table 4.16 looks at the cross-tabulation of duration of practice of pharmacists and their perception of skill of homoeopaths.

Table 4.16 Cross-tabulation: Duration of practice of pharmacists and perception of skill of homoeopaths

<table>
<thead>
<tr>
<th>Duration of practice * Skilled Cross tabulation</th>
<th>Skilled</th>
<th></th>
<th></th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
<td>No</td>
<td>Unsure</td>
<td></td>
</tr>
<tr>
<td>Less than 5 yrs</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Count</td>
<td>50.0%</td>
<td>0%</td>
<td>50.0%</td>
<td>100.0%</td>
</tr>
<tr>
<td>% Within Duration of practice</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6-10 yrs</td>
<td>2</td>
<td>2</td>
<td>4</td>
<td>8</td>
</tr>
<tr>
<td>Count</td>
<td>25.0%</td>
<td>25.0%</td>
<td>50.0%</td>
<td>100.0%</td>
</tr>
<tr>
<td>% Within Duration of practice</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11-15 yrs</td>
<td>8</td>
<td>4</td>
<td>9</td>
<td>21</td>
</tr>
<tr>
<td>Count</td>
<td>38.1%</td>
<td>19.0%</td>
<td>42.9%</td>
<td>100.0%</td>
</tr>
<tr>
<td>% Within Duration of practice</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16-20 yrs</td>
<td>10</td>
<td>1</td>
<td>13</td>
<td>24</td>
</tr>
<tr>
<td>Count</td>
<td>41.7%</td>
<td>4.2%</td>
<td>54.2%</td>
<td>100.0%</td>
</tr>
<tr>
<td>% Within Duration of practice</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>21-30 yrs</td>
<td>9</td>
<td>10</td>
<td>7</td>
<td>26</td>
</tr>
<tr>
<td>Count</td>
<td>34.6%</td>
<td>38.5%</td>
<td>26.9%</td>
<td>100.0%</td>
</tr>
<tr>
<td>% Within Duration of practice</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>More than 30 yrs</td>
<td>4</td>
<td>7</td>
<td>4</td>
<td>15</td>
</tr>
<tr>
<td>Count</td>
<td>26.7%</td>
<td>46.7%</td>
<td>26.7%</td>
<td>100.0%</td>
</tr>
<tr>
<td>% Within Duration of practice</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>34</td>
<td>24</td>
<td>38</td>
<td>96</td>
</tr>
<tr>
<td>Count</td>
<td>35.4%</td>
<td>25.0%</td>
<td>39.6%</td>
<td>100.0%</td>
</tr>
</tbody>
</table>
The Pearson's Chi-square Test gives a P-value = .174 ≥ .05. Therefore it is established that there is no association between the duration of practice of pharmacists and their perception of how skilled homoeopaths are. See Table 4.17.

Table 4.17 Chi-square test 6

<table>
<thead>
<tr>
<th>Chi-Square Tests</th>
<th>Value</th>
<th>df</th>
<th>Asymp. Sig. (2-sided)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Chi-Square</td>
<td>13.972(a)</td>
<td>10</td>
<td>.174</td>
</tr>
<tr>
<td>Likelihood Ratio</td>
<td>15.992</td>
<td>10</td>
<td>.100</td>
</tr>
<tr>
<td>Linear-by-Linear Association</td>
<td>.485</td>
<td>1</td>
<td>.486</td>
</tr>
<tr>
<td>N of Valid Cases</td>
<td>96</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

7 cells (38.9%) have expected count less than 5. The minimum expected count is .50.

4.4.8.1 Practice, prescription or recommendation of complementary medicine

(Re: Question 12)

56% of pharmacists and 47.4 % of GPs practice, prescribe or recommend some type of complementary medicine.
4.4.8.2 Specific complementary therapies that are practiced, prescribed or recommended (Re: Question 12)

Only 22 pharmacists and 31 GPs, who answered yes to Question 12, specified what type of complementary therapy they practiced, prescribed or recommended.

Table 4.18 illustrates the different complementary therapies that are practiced, prescribed or recommended by GPs and pharmacists in this survey. Most responses were received for homoeopathic remedies with an equal number from pharmacists and GPs (9 each), while herbal products received 12 responses in total. This indicates that in this study, homoeopathy ranks among the most commonly used/recommended therapies amongst complementary therapies.

Therapies and complementary medicines that were mentioned most frequently were: acupuncture, Ayurveda, Arnica, and "Rescue Remedy" and Vitamin supplementation.
Table 4.18 Specific complementary therapies practiced, prescribed or recommended by pharmacists and GPs.

<table>
<thead>
<tr>
<th>THERAPY</th>
<th>Number of Pharmacists</th>
<th>Number of GPs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acupuncture</td>
<td>0</td>
<td>5</td>
</tr>
<tr>
<td>Anthroposophical medicine</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>&quot;Anti-allergy&quot;</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Any type of complementary medicine</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Arnica</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Aromatherapy</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>Ayurveda</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>&quot;Becalm&quot;</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>&quot;Biral&quot;</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>&quot;Bio-force&quot;</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>Chinese medicine</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Chiropractic</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>Dietary regulation</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>&quot;Dr Vogel&quot; products</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>&quot;Echinaforce&quot;</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Glucosamine</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>&quot;Heel&quot; products</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>Herbal products</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td><strong>Homoeopathic remedies</strong></td>
<td><strong>9</strong></td>
<td><strong>9</strong></td>
</tr>
<tr>
<td>Homotoxicology</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Immune boosters</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Iridology</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Omega 3 and 6</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Phyto-oestrogens</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Probiotics</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Quantum therapy</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>&quot;Rescue Remedy&quot;</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>Spirulina</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>Tissue salts</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>&quot;Traumeel&quot;</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Vitamins</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>&quot;Weleda&quot; products</td>
<td>3</td>
<td>0</td>
</tr>
</tbody>
</table>
4.4.9 Overall perception of homoeopathy

Table 4.19 illustrates the overall perceptions of pharmacists and GPs of homoeopathy.

Table 4.19 Overall perception of homoeopathy

<table>
<thead>
<tr>
<th>PERCEPTION</th>
<th>Percentage of Pharmacists</th>
<th>Percentage of GPs</th>
<th>Combined Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Uncomfortable with it, but it is effective for some</td>
<td>46,6</td>
<td>41,2</td>
<td>43,9</td>
</tr>
<tr>
<td>Excellent mode of treatment</td>
<td>12,1</td>
<td>12,4</td>
<td>12,25</td>
</tr>
<tr>
<td>Quackery - does more harm than good</td>
<td>5,2</td>
<td>4,1</td>
<td>4,65</td>
</tr>
<tr>
<td>Not informed enough to comment</td>
<td>36,2</td>
<td>42,3</td>
<td>39,25</td>
</tr>
</tbody>
</table>

It is evident that most respondents are uncomfortable with homoeopathy, and that a large proportion is not informed enough to comment. These perceptions are further illustrated in Figure 4.30, Figure 4.31 and Figure 4.32.

Figure 4.30 Overall perception: Pharmacists
Figure 4.31 Overall perception: General Practitioners

Uncomfortable (41.2%)
Not informed enough (42.3%)
Excellent (12.4%)
Quackery (4.1%)

Figure 4.32 Overall perception: Pharmacists and General Practitioners combined

Uncomfortable (43.9%)
Not informed enough (39.2%)
Excellent (12.2%)
Quackery (4.6%)
4.4.9.1 The relationship between gender of GPs and their overall perception of homoeopathy

The Pearson's Chi-square Test was used to test the relevant hypothesis (see 3.5.6.5). Table 4.20 looks at the cross-tabulation of gender of GPs against their overall perception of homoeopathy.

Table 4.20 Cross-tabulation: Gender of GPs and overall perception of homoeopathy

<table>
<thead>
<tr>
<th>Gender * Overall perception Cross tabulation</th>
<th>Uncomfortable with it, but effective for some</th>
<th>Excellent mode of treatment</th>
<th>Quackery - more harm than good</th>
<th>Not informed enough to comment</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>Male</td>
<td>31</td>
<td>11</td>
<td>4</td>
<td>37</td>
</tr>
<tr>
<td>% Within Gender</td>
<td>Male</td>
<td>37.3%</td>
<td>13.3%</td>
<td>4.8%</td>
<td>100.0%</td>
</tr>
<tr>
<td>Gender</td>
<td>Female</td>
<td>9</td>
<td>1</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td>% Within Gender</td>
<td>Female</td>
<td>64.3%</td>
<td>7.1%</td>
<td>0%</td>
<td>100.0%</td>
</tr>
<tr>
<td>Total</td>
<td>Male</td>
<td>40</td>
<td>12</td>
<td>4</td>
<td>41</td>
</tr>
<tr>
<td>% Within Gender</td>
<td>Male</td>
<td>41.2%</td>
<td>12.4%</td>
<td>4.1%</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

Table 4.21 shows that the test gives a P-value = .276 ≥ 0.5. Therefore it has been established that there is no association between the two characteristics.

Table 4.21 Chi-square test 7

Chi-Square Tests

<table>
<thead>
<tr>
<th></th>
<th>Value</th>
<th>df</th>
<th>Asymp. Sig. (2-sided)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Chi-Square</td>
<td>3.870(a)</td>
<td>3</td>
<td>.276</td>
</tr>
<tr>
<td>Likelihood Ratio</td>
<td>4.321</td>
<td>3</td>
<td>.229</td>
</tr>
<tr>
<td>Linear-by-Linear Association</td>
<td>2.512</td>
<td>1</td>
<td>.113</td>
</tr>
<tr>
<td>N of Valid Cases</td>
<td>97</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a 3 cells (37.5%) have expected count less than 5. The minimum expected count is .58.
4.4.9.2 The relationship between gender of pharmacists and their overall perception of homoeopathy

The Pearson's Chi-square Test was used to test the relevant hypothesis (see 3.5.6.6). Table 4.22 looks at the cross-tabulation of gender of pharmacists against their overall perception of homoeopathy.

Table 4.22 Cross-tabulation: Gender of pharmacists and overall perception of homoeopathy

<table>
<thead>
<tr>
<th>Gender</th>
<th>Overall perception Cross tabulation</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Uncomfortable with it, but effective for some</td>
<td>Excellent mode of treatment</td>
</tr>
<tr>
<td></td>
<td>Count</td>
<td>31</td>
</tr>
<tr>
<td></td>
<td>Within Gender</td>
<td>37.3%</td>
</tr>
<tr>
<td>Female</td>
<td>Count</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>Within Gender</td>
<td>64.3%</td>
</tr>
<tr>
<td>Total</td>
<td>Count</td>
<td>40</td>
</tr>
<tr>
<td></td>
<td>Within Gender</td>
<td>41.2%</td>
</tr>
</tbody>
</table>
Table 4.23 shows that the test gives a P-value $= 0.276 \geq 0.5$. Therefore it has been established that there is no association between the two characteristics.

Table 4.23 Chi-square test 8

<table>
<thead>
<tr>
<th></th>
<th>Value</th>
<th>df</th>
<th>Asymp. Sig. (2-sided)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Chi-Square</td>
<td>3.870(a)</td>
<td>3</td>
<td>0.276</td>
</tr>
<tr>
<td>Likelihood Ratio</td>
<td>4.321</td>
<td>3</td>
<td>0.229</td>
</tr>
<tr>
<td>Linear-by-Linear</td>
<td>2.512</td>
<td>1</td>
<td>0.113</td>
</tr>
<tr>
<td>Association N of Valid Cases</td>
<td>97</td>
<td>97</td>
<td></td>
</tr>
</tbody>
</table>

3 cells (37.5%) have expected count less than 5. The minimum expected count is .58.

4.4.9.3 The relationship between the duration of practice of GPs and their overall perception of homoeopathy

The Pearson's Chi-square Test was used to test the relevant hypothesis (see 3.5.6.9).

Table 4.24 looks at the cross-tabulation of duration of practice of GPs against their overall perception of homoeopathy.

Table 4.25 shows that the test gives a P-value $= 0.435 \geq 0.5$. Therefore it has been established that there is no association between the two characteristics.
Table 4.24 Cross-tabulation: Duration of practice of GPs and overall perception of homoeopathy

<table>
<thead>
<tr>
<th>Duration of practice</th>
<th>Count</th>
<th>Uncomfortable with it, but effective for some</th>
<th>Excellent mode of treatment</th>
<th>Quackery - more harm than good</th>
<th>Not informed enough to comment</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 5 yrs</td>
<td></td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>6-10 yrs</td>
<td></td>
<td>100.0%</td>
<td>.0%</td>
<td>.0%</td>
<td>.0%</td>
<td>100.0%</td>
</tr>
<tr>
<td>11-15 yrs</td>
<td></td>
<td>62.5%</td>
<td>.0%</td>
<td>12.5%</td>
<td>25.0%</td>
<td>100.0%</td>
</tr>
<tr>
<td>16-20 yrs</td>
<td></td>
<td>38.1%</td>
<td>14.3%</td>
<td>.0%</td>
<td>47.6%</td>
<td>100.0%</td>
</tr>
<tr>
<td>21-30 yrs</td>
<td></td>
<td>25.0%</td>
<td>8.3%</td>
<td>8.3%</td>
<td>58.3%</td>
<td>100.0%</td>
</tr>
<tr>
<td>More than 30 yrs</td>
<td></td>
<td>22.0%</td>
<td>15.4%</td>
<td>.0%</td>
<td>42.3%</td>
<td>100.0%</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>46.7%</td>
<td>20.0%</td>
<td>6.7%</td>
<td>26.7%</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

Table 4.25 Chi-square test 9

<table>
<thead>
<tr>
<th></th>
<th>Value</th>
<th>df</th>
<th>Asymp. Sig. (2-sided)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Chi-Square</td>
<td>15.228(a)</td>
<td>15</td>
<td>.435</td>
</tr>
<tr>
<td>Likelihood Ratio</td>
<td>18.250</td>
<td>15</td>
<td>.250</td>
</tr>
<tr>
<td>Linear-by-Linear Association</td>
<td>.023</td>
<td>1</td>
<td>.879</td>
</tr>
<tr>
<td>N of Valid Cases</td>
<td>96</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a 16 cells (66.7%) have expected count less than 5. The minimum expected count is .08.
4.4.9.4 The relationship between the duration of practice of pharmacists and their overall perception of homoeopathy

The Pearson's Chi-square Test was used to test the relevant hypothesis (see 3.5.6.10). Table 4.26 looks at the cross-tabulation of duration of practice of pharmacists and their overall perception of homoeopathy.

Table 4.26 Cross-tabulation: Duration of practice of pharmacists and overall perception of homoeopathy

<table>
<thead>
<tr>
<th>Duration of practice</th>
<th>Count</th>
<th>Uncomfortable with it, but effective for some</th>
<th>Excellent mode of treatment</th>
<th>Quackery - more harm than good</th>
<th>Not informed enough to comment</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 5 yrs</td>
<td></td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>2</td>
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<td>6-10 yrs</td>
<td>Count</td>
<td>5</td>
<td>0%</td>
<td>0%</td>
<td>2%</td>
<td>5</td>
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<tr>
<td>11-15 yrs</td>
<td>Count</td>
<td>8</td>
<td>3%</td>
<td>12.5%</td>
<td>0%</td>
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</tr>
<tr>
<td>16-20 yrs</td>
<td>Count</td>
<td>6</td>
<td>14.3%</td>
<td>0%</td>
<td>47.6%</td>
<td>14</td>
</tr>
<tr>
<td>21-30 yrs</td>
<td>Count</td>
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<td>4%</td>
<td>0%</td>
<td>42.3%</td>
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<td>0%</td>
<td>42.3%</td>
<td>15</td>
</tr>
<tr>
<td>Total</td>
<td>Count</td>
<td>39</td>
<td>12%</td>
<td>4%</td>
<td>42.7%</td>
<td>96</td>
</tr>
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</table>

79
Table 4.27 shows that the test gives a P-value = .435 ≥ 0.5. Therefore it has been established that there is no association between the two characteristics.

Table 4.27 Chi-square test 10

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<th>Value</th>
<th>df</th>
<th>Asymp. Sig (2-sided)</th>
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</thead>
<tbody>
<tr>
<td>Pearson Chi-Square</td>
<td>15.228(a)</td>
<td>15</td>
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<td>Likelihood Ratio</td>
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</tr>
<tr>
<td>N of Valid Cases</td>
<td>96</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a 16 cells (66.7%) have expected count less than 5. The minimum expected count is .08.
CHAPTER 5

DISCUSSION

In this discussion, three groups are referred to:

1. The total population refers to all pharmacists and GPs who received questionnaires (a total of 484).
2. The sample of GPs refers to all GPs who received a questionnaire (a total of 370).
3. The sample of pharmacists refers to all pharmacists who received a questionnaire (a total of 114).

The initial challenge of this research was in obtaining a good response rate. Previous research that used postage as a method of distributing surveys (e.g. that done by Sukdev in 1998) indicated that a low response rate was likely. Therefore, to improve the response rate of this survey, questionnaires were posted to the total population twice. The first set of questionnaires was posted, followed by a 2-week delay before a second set was posted. Despite this measure, the total response rate was 32.02% (almost equivalent to the response rate received by Sukdev in 1998). This indicates that the postal method of acquiring responses may not be an effective one.
The sample of GPs equated to 76.45% of the total population and the sample of pharmacists equated to 23.55% of the total population. A higher response rate was received for the pharmacy sample group (50.87% of pharmacists who were contacted responded) whereas only 26.22% of GPs responded. The researcher feels that there are four possible reasons for this large split in response rates:

- GPs are too busy to complete a questionnaire, as it may mean that they lose a patient (time-consuming). Five blank questionnaires were received from GPs with a note stating that they had no time to complete the questionnaire.
- Receptionists of GPs often filter out "unnecessary" mail to save time.
- Questionnaires were posted during the December/January period, when many GPs close their practices for the vacation – a large number of GPs may have not received their questionnaires on time as a result. Most pharmacies remain opened during this vacation period.
- Pharmacies often employ two or more pharmacists – this would allow for at least one pharmacist to take the time off to fill in a questionnaire.
5.1 Demographics

5.1.1 Gender

Out of the total population, 74.84% of respondents was male (56.9% of pharmacists and 85.57% of GPs). The notable gender split for the GP sample group may be due to the fact that in the past, there has not been a long tradition of women studying medicine. The same may be said for the pharmacist sample group, but here the gender split is not as great as for the GPs. The reason for this may be that the pharmacy course is shorter than that of medicine, therefore more females would have qualified as pharmacists than as GPs by the time of this study i.e. the gender gap for pharmacists is closing faster than that for GPs.

5.1.2 Age

Most pharmacists were between the ages of 26-35 years (43.1%), while most GPs (35.05%) belonged to the older age category (46-55 years) i.e. pharmacists who responded were generally younger than the GPs who responded. This may be due to the fact that GPs generally begin private practice later in their lives (following a protracted period of training, internship and community service), whereas pharmacists may be employed at a pharmacy immediately after qualifying. Also, many young GPs leave South Africa to seek employment in other countries.
5.1.3 Area

Most responses were received from the central Durban area (for both pharmacists and GPs). This is in keeping with more job opportunities being available in the city - a greater number of pharmacists and GPs find work in the city. For pharmacists, most responses were received from the suburbs of Chatsworth and Queensburgh. This is likely due to these areas being centers of business activity in the greater Durban area (a high density of the general population of Durban reside in Chatsworth and surrounding areas – including Queensburgh), warranting more pharmacies in these areas. For GPs most responses were received from the city and Chatsworth, for the same reasons mentioned above.

5.1.4 Duration of practice

Most pharmacists had been practicing for between 11-15 years, while most GPs had been practicing for a longer period (21-30 years). Very few pharmacists and GPs had been practicing for less than 5 years (10.3% and 2.1% respectively). This is due to a large number of the total population being older. These results indicate that the majority of responses were received from more experienced GPs and pharmacists.
5.2 General knowledge of homoeopathy

5.2.1 Knowledge of homoeopathy

68.42% of pharmacists had some knowledge of homoeopathy, while a smaller percentage of GPs (57.73%) knew something about homoeopathy. This may be due to the fact that many pharmacies stock homoeopathic remedies; therefore pharmacists were more exposed to homoeopathy than GPs. More pharmacists were familiar with homoeopathy than GPs, for the same reason.

5.2.2 Legal recognition of homoeopathy

The majority of respondents perceived that South African law recognizes homoeopathy as a therapy. However, more pharmacists perceived that homoeopathy was legally recognized than GPs. This may be due to pharmacists getting more exposure to homoeopathy (in pharmacies) than GPs in private practice. Pharmacists are therefore more likely to be aware of the legal recognition of homoeopathy and homoeopathic remedies than GPs.

5.2.3 Funding by health care insurers

More pharmacists than GPs perceived that homoeopathy was funded by insurers (55.17% of pharmacists compared to 41.67% of GPs). This may be due to increased exposure to homoeopathy at pharmacies. Many pharmacies in South Africa are contracted to medical-aids; therefore pharmacists are likely to have a working knowledge of which medicines or products are funded by medical aids. A large percentage of GPs were unsure (37.5%).
5.2.4 **Training of homoeopaths**

Most pharmacists and GPs agreed that training courses for homoeopathy exist in South Africa. Opinions were varied on the length of the training course. A reasonable percentage of pharmacists and GPs (26.79% and 21.98% respectively) perceived that the course in homoeopathy was of 5 years duration. 17.86% of pharmacists and 15.38% of GPs perceived that the course was longer than 5 years in duration. Results were also varied for the level of education that respondents felt homoeopaths received. The majority of respondents perceived that homoeopaths received a diploma. 17.54% of pharmacists perceived that homoeopaths receive a Master’s degree, while only 4.35% of GPs held the same perception. Most respondents perceived that homoeopaths were required to undergo work-experience training. However, more pharmacists (67.24%) than GPs (64.58%) held this perception.

Overall, it can be inferred that pharmacists in Durban generally know more about homoeopathic education than GPs. This may be due to increased exposure to homoeopathy in pharmacies.

5.2.5 **Awareness of training institutions and the D.I.T. Homoeopathic Day Clinic**

The majority of all respondents (75%) were aware of the homoeopathic training institutes in Durban and Johannesburg. However, opinion was divided on the awareness of the Homoeopathic Day Clinic at the Durban Institute of Technology (D.I.T). More than 40% of all respondents were not aware of the clinic and 7% were unsure.
5.3 **Perception of homoeopathy**

5.3.1 **Scientific basis**

Opinions varied as to whether homoeopathy has a scientific basis or not. A large percentage (29.71% of all respondents) was unsure in this regard and 22.59% felt that homoeopathy did not have a scientific basis. However, more GPs than pharmacists perceived that homoeopathy has a scientific basis (51.55% compared to 42.86%).

5.3.2 **Legitimacy of homoeopathy**

65.75% of all respondents perceived that homoeopathy is a legitimate form of medicine (65.98% of GPs and 65.52% of pharmacists). These similar results for both groups show that there is consensus on the legitimacy of homoeopathy between the two groups.

5.3.3 **Modality**

Most respondents perceived that homoeopathy was natural medicine. However, a sizeable percentage (17.71% of GPs and 12.07% of pharmacists) perceived that homoeopathy was placebo.
5.3.4 Procedures conducted by a homoeopath

Most pharmacists and GPs perceived that homoeopaths took detailed histories of their patients (past medical history, family history and social history). Opinions were varied for the procedures that involved physical examinations (cardiovascular, respiratory, abdominal, neurological, musculo-skeletal and genitourinary), suggesting that pharmacists and GPs are unsure if homoeopaths have the relevant training or experience to conduct such procedures. However, most respondents agreed that homoeopaths do check the vital signs of their patients.

5.3.5 Benefit of homoeopathic treatment

Most respondents perceived that homoeopathy was useful in the treatment of headaches, mechanical injury, inflammatory disease, viral and bacterial disease, autoimmune disease, psychosomatic disease and psychological disease. The only conditions not perceived by the majority of GPs and pharmacists to be suitable for homoeopathic treatment were neurological diseases and cancer, and then only narrowly so. A minority of respondents perceived that homoeopathy was not beneficial for any condition.

5.3.6 Duration of homoeopathic consultation

The most common perception by pharmacists and GPs regarding a homoeopathic consultation was that it lasted 20 or 30 minutes. Ten pharmacists and ten GPs perceived that a homoeopathic consultation lasted one hour.
5.4 Communication

5.4.1 Quality of communication between pharmacists/GPs and homoeopaths

Generally, communication between practitioners was perceived to be poor or non-existent by both groups. 56.7% of GPs and 43.1% of pharmacists perceived that communication was poor while 40.2% of GPs and 48.3% of pharmacists perceived that it was non-existent. These figures reflect that very little interaction exists between these practitioners in Durban at present. An important question at this stage is, why is communication between these practitioners so poor?

Similar trends are observed for the perceived level of co-operation, with most respondents perceiving that co-operation was non-existent or poor. A possible reason for this poor communication and co-operation could be a lack of understanding of the different modalities, and of what benefits each modality may offer. From analysis of results in 5.3, it can be inferred that there are various misconceptions regarding training, qualification and competence of homoeopaths, which in turn can lead to skepticism towards homoeopathy.

5.4.2 Benefit of improved communication and co-operation

81.2% of all respondents perceived that improved communication and co-operation would be beneficial to patients. This indicates that there is an urgent need to improve relationships between these practitioners (pharmacists/GPs and homoeopaths), for the benefit of patients.
5.4.3 Referrals

The referral rate between practitioners (pharmacists/GPs and homoeopaths) was found to be very low (more than 60% of all respondents had not referred patients to homoeopaths, or had patients referred to them by homoeopaths). However, approximately 80% of all respondents stated that they would give feedback to homoeopaths or would like to receive feedback from homoeopaths regarding referred patients. It is therefore clear that there is a desire for improved communication, despite the current situation of poor co-operation between GPs/pharmacists and homoeopaths.

For unresolved cases, 33.9% of pharmacists and 38.5% of GPs were willing to decide on further action together with homoeopaths (where cases were unresolved following homoeopathic treatment). Similar results were obtained where cases remained unresolved following treatment from a GP or pharmacist (33.3% of pharmacists and 47.9% of GPs were willing to decide on further action together with homoeopaths). These results indicate that at least one third of respondents show a desire to co-operate with homoeopaths in the interest of the patient.

Most respondents (68.4% of pharmacists and 79.8% of GPs) perceived that co-operation would be beneficial to all parties involved. Respondents were asked to supply reasons for co-operation being beneficial to all. However, only 51.72% of pharmacists and 35.05% of GPs who agreed that co-operation would be beneficial, supplied a reason.
Pharmacists supplied three reasons for co-operation being beneficial: (1) shared knowledge leads to all parties learning more about health, (2) holistic treatment of the patient will be achieved and (3) each modality has its own benefits and therefore deserves its place in health care. GPs supplied 5 reasons for co-operation being beneficial, including the 3 reasons given by pharmacists above as well as: (4) all practitioners will benefit financially and (5) the patient can be more involved in decision-making and would be free to choose whom he/she would like to consult with. These reasons clearly indicate a desire to pool resources in order for all parties to benefit.

5.4.4 Skill of homoeopaths

Results were varied as to whether participants perceived homoeopaths to be skilled practitioners or not. An average of 37,35% of all respondents perceived that homoeopaths were skilled practitioners, while an average of 29,9% perceived that they are not skilled. 32,75% of all respondents were unsure in this regard. These varied results show that there may be doubt in the medical community regarding the competence and skill of homoeopaths.

5.4.5 Practice, prescription and recommendation of complementary therapies

Homoeopathy and homoeopathic remedies were most often practiced, prescribed or recommended by GPs and pharmacists than any other type of complementary medicine. This indicates that homoeopathy may be more popular amongst GPs and pharmacists than other complementary therapies.
5.4.6 Overall perception

The overall perceptions on homoeopathy were remarkably similar for both groups. Most pharmacists (46.6%) and GPs (41.2%) were uncomfortable with homoeopathy but found it to be effective for some patients. A large percentage of pharmacists (36.2%) and GPs (42.3%) perceived that they were not informed enough to comment. Less than 5.2% of all respondents perceived that homoeopathy was quackery and that it does more harm than good. Only 12.1% of pharmacists and 12.4% of GPs perceived homoeopathy to be an excellent mode of treatment. These results highlight the limited knowledge of homoeopathy that exists in the medical community in the greater Durban area.

5.4.7 Critique of current research

The results do not reflect the total picture of the views of pharmacists and GPs in the Greater Durban area, since only those practitioners that were listed in the Durban Telephone Directory and the Durban Yellow Pages of October 2003/2004 were included. It would be beneficial to conduct similar research on all registered pharmacists and GPs in the Greater Durban area. Also, only a 32.02% return on questionnaires was received.
Only 30 pharmacists and 34 GPs completed question 10 of Part four, which asked them to supply reasons for why improved co-operation would be beneficial. Only 22 pharmacists and 31 GPs completed question 12 of Part four which asked them to specify the type of complementary therapy they practiced, prescribed or recommended.

Postal questionnaires are widely used to collect data in health research and are often the only financially viable option when collecting information from large, geographically dispersed populations (Edwards, 2002). Other advantages of postal questionnaires is that it is possible for a single researcher to access many respondents and that it is relatively easy to code data. The disadvantages of conducting a postage questionnaire is that low response rates are possible and the researcher cannot ensure that all questions are answered.\(^3\)

Other methods of data collection such as conducting personal interviews or telephone interviews may provide better options for further research. Personal interviews yield higher response rates than other methods of data collection, and also ensure completeness of questionnaires. However, personal interviews are more costly and may permit interviewer bias. Telephone interviews require a smaller amount of time for data collection than postal questionnaires or personal interviews, but offer less reliability of data and accuracy of information.\(^3\)

The questionnaire did not require respondents to state their race. In retrospect, this information could have provided a more sophisticated view of where gaps exist and where more work needs to be done.
CHAPTER 6

CONCLUSIONS AND RECOMMENDATIONS

6.1 Conclusions

The results of this survey provide demographic data on GPs and pharmacists in the Greater Durban region, and their perceptions of homoeopathy. Their general knowledge of homoeopathy, perception of homoeopathy as a therapy, and their views on communication with homoeopaths have been assessed and conclusions can be drawn from this.

Numerous areas of concern emerged from this study.

A large proportion of GPs and pharmacists knew little or nothing concerning the recognition of homoeopathy as a therapy, despite the growing popularity of homoeopathy around the world and in South Africa. One of the main aims of this study was to determine how much is known about the education that homoeopaths receive. It was found that there are numerous misconceptions regarding homoeopathic training in this country. Pharmacists and GPs also doubted the skill of homoeopaths as medical practitioners.

It was determined that there is little or no communication between homoeopaths and GPs/pharmacists, despite acknowledgement that communication would be beneficial for patients. Referrals between homoeopaths and GPs/pharmacists was found to be almost non-existent. However, it was discovered that a
willingness to communicate and co-operate does exist amongst practitioners in this study. The overall view of GP's and pharmacists in this survey indicates a limited knowledge of homoeopathy in general.

An important question that arises is, "why is communication between practitioners so poor?" It is possible that lack of knowledge and understanding has lead to skepticism and mistrust amongst health care professionals. Thus, there is limited interaction and co-operation between practitioners. There is an urgent need to address the lack of knowledge that exists concerning homoeopathy.

This study provides valuable information on the feelings and attitudes of pharmacists and GPs towards homoeopathy. It also points out that there is a need for change in the health care system in South Africa; working relationships need to be forged between organizations and health professionals, and clear standards need to be defined for the homoeopathic profession.
6.2 **Recommendations**

The current study only represents a small portion of data that needs to be collected and documented to ensure that homoeopathy makes a vital and significant contribution to the healthcare system in South Africa. The following recommendations are made:

a. This study was limited to the greater Durban area. A larger quantitative study would be justified in order to obtain broader perspectives. It is recommended that surveys be conducted in other areas of South Africa. It would be interesting to see if there are differences of opinion across the different provinces. Discretion should be exercised when correlations are explored between different studies, due to disparity between methodology and survey populations.

b. Inferences cannot be generalized to the whole population of GPs and pharmacists. The sample group in this study did not adequately reflect the population of GPs and pharmacists. Future studies should aim to include all registered pharmacists and GP's in Kwazulu Natal.

c. Future studies should be designed using other methods of data collection, as the postage method may not be effective in yielding a good response rate. Interviewing of participants may be a better method of acquiring responses, as it requires less effort from participants.
d. Surveys of other South African conventional medical practitioners need to be conducted, to ascertain the views of the medical community in general towards homoeopathy.

e. Race should be included as a demographic variable in future studies of this nature.

f. Education programs for GPs and pharmacists need to be formulated in order to clear up misconceptions regarding homoeopathy.

g. Surveys of conventional medical students need to be conducted in South Africa, to ascertain their perceptions of homoeopathy as a therapy, and to assess their interest in studying homoeopathy. Research should also be conducted on medical doctors who have studied homoeopathy, and who use homoeopathy in their practices.
REFERENCES


INTERNET REFERENCES


## APPENDICES

| Appendix A – Information letter                  | 107 |
| Appendix B – Questionnaire                      | 108 |
| Appendix C – M Tech (Hom) curriculum            | 115 |
Appendix A

Dheepa Maharajh
30 Tilana Way
The Glen
Queensburgh
4093

Dear Doctor/Pharmacist

I am a student at the Durban Institute of Technology and I am presently involved in a research project to fulfill the requirements of my course.

The title of my project is A survey to determine the perceptions of general practitioners and pharmacists in the greater Durban region towards homoeopathy.

I have chosen this topic because no survey assessing perceptions of GPs and pharmacists towards homoeopathy had been done before in the greater Durban area. The results of this survey may prove to be valuable, considering the changes that are occurring in our national health system.

I would be grateful if you could assist me by completing the attached questionnaire.

The statements that follow in the questionnaire are simple and require your honest response. It is important that you answer all the statements. You are not required to state your name, and your responses will be kept strictly confidential. Anonymity will be maintained in the following ways: (a) Respondents are not asked to supply their names, addresses or other information that would allow identification. (b) There will be no way of identifying respondents from their returned questionnaires. There is therefore no risk to you the respondent.

All GPs and pharmacists currently practicing in the greater Durban area, and whose details are listed in the Durban Telephone Directory/ Yellow Pages of October 2003/2004 will be included in this study. This prevents bias and provides a large, well-represented sample group.

Consent to participate in this simple survey will be assumed by your completion and return of this questionnaire. Please insert your completed questionnaire into the postage-paid envelope provided and return it at your earliest convenience.

If you would like further information, please contact Dr David Naude at the Durban Institute of Technology – Day Clinic: Telephone 031-204 2041

Thank you for your time and co-operation.

Yours faithfully

Dheepa Maharajh
Appendix B

PERCEPTIONS TOWARD HOMOEOPATHY QUESTIONNAIRE
Modified from RD Smink (BSc) and J Langworthy (MPhil)

Please answer by ticking the appropriate box.

**PART ONE: PERSONAL INFORMATION**

1. Are you:
   - Male
   - Female

2. Which age group are you in?
   - < 25 years
   - 26-35 years
   - 36-45 years
   - 46-55 years
   - 56-65 years
   - > 65 years

3. Are you a:
   - General Practitioner
   - Pharmacist

4. Area of work

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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

5. Duration of practice as a general practitioner/pharmacist
   - < 5 years
   - 6-10 years
   - 11-15 years
   - 16-20 years
   - 21-30 years
   - > 30 years
PART TWO: GENERAL KNOWLEDGE OF HOMOEOPATHY

1. How would you describe your knowledge of homoeopathy?

<table>
<thead>
<tr>
<th>Never heard of it</th>
<th>Heard of it only</th>
<th>Know something about it</th>
<th>Quite familiar with it</th>
</tr>
</thead>
</table>

2. Is homoeopathy recognised by law in South Africa?

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
<th>Unsure</th>
</tr>
</thead>
</table>

3. Do health care insurers in South Africa fund homoeopathy?

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
<th>Unsure</th>
</tr>
</thead>
</table>

4. Do you know if there are any training courses available for people to become homoeopaths?

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
<th>Unsure</th>
</tr>
</thead>
</table>

5. How long do you think it takes to qualify as a homoeopath in South Africa?

<table>
<thead>
<tr>
<th>1 year</th>
<th>2 years</th>
<th>3 years</th>
<th>4 years</th>
<th>5 years</th>
<th>&gt; 5 years</th>
</tr>
</thead>
</table>

6. What level of education is required to practice as a homoeopath?

<table>
<thead>
<tr>
<th>None</th>
<th>Diploma</th>
<th>Degree</th>
<th>Honours</th>
<th>Masters</th>
</tr>
</thead>
</table>
7. Are homoeopaths required to undergo any work-experience training program?

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
<th>Unsure</th>
</tr>
</thead>
</table>

8. Are you aware of the homoeopathic training institution at the Durban Institute of Technology (formerly Technikon Natal) and at Wits Technikon?

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
<th>Unsure</th>
</tr>
</thead>
</table>

9. Are you aware of the existence of the Homoeopathic Day Clinic at the Durban Institute of Technology?

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
<th>Unsure</th>
</tr>
</thead>
</table>

**PART THREE: PERCEPTION OF HOMOEOPATHY**

1. Do you think homoeopathy has any scientific basis?

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
<th>Unsure</th>
</tr>
</thead>
</table>

2. Do you consider homoeopathy to be a legitimate form of medicine?

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
<th>Unsure</th>
</tr>
</thead>
</table>

3. Which do you consider homoeopathic medicine to be?

<table>
<thead>
<tr>
<th>Placebo</th>
<th>Preventative medicine</th>
<th>Herbal medicine</th>
<th>Natural medicine</th>
<th>Unsure</th>
</tr>
</thead>
</table>

110
4. What kind of procedures would you expect a homoeopath to perform on his patient?

<table>
<thead>
<tr>
<th>Procedure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Check vital signs</td>
</tr>
<tr>
<td>Cardiovascular examination</td>
</tr>
<tr>
<td>Respiratory examination</td>
</tr>
<tr>
<td>Neurological examination</td>
</tr>
<tr>
<td>Abdominal examination</td>
</tr>
<tr>
<td>Musculo-skeletal examination</td>
</tr>
<tr>
<td>Genito-urinary review</td>
</tr>
<tr>
<td>Take a past medical history</td>
</tr>
<tr>
<td>Take a family history</td>
</tr>
<tr>
<td>Take a social history</td>
</tr>
<tr>
<td>Take a radiological history</td>
</tr>
<tr>
<td>Auscultation</td>
</tr>
<tr>
<td>Laboratory tests</td>
</tr>
<tr>
<td>None of the above</td>
</tr>
<tr>
<td>All of the above</td>
</tr>
</tbody>
</table>

5. Homoeopathic treatment may be useful in which of the following complaints?

<table>
<thead>
<tr>
<th>Disease/Complaint</th>
</tr>
</thead>
<tbody>
<tr>
<td>Any disease or disorder</td>
</tr>
<tr>
<td>Headache</td>
</tr>
<tr>
<td>Mechanical injury</td>
</tr>
<tr>
<td>Inflammatory disease</td>
</tr>
<tr>
<td>Viral and bacterial disease</td>
</tr>
<tr>
<td>Auto-immune disease</td>
</tr>
<tr>
<td>Psychosomatic disease</td>
</tr>
<tr>
<td>Psychological disease</td>
</tr>
<tr>
<td>Neurological disease</td>
</tr>
<tr>
<td>Cancer</td>
</tr>
<tr>
<td>None of the above</td>
</tr>
</tbody>
</table>

6. The average homoeopathic consultation lasts approximately

<table>
<thead>
<tr>
<th>Duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>10 minutes</td>
</tr>
<tr>
<td>20 minutes</td>
</tr>
<tr>
<td>30 minutes</td>
</tr>
<tr>
<td>40 minutes</td>
</tr>
<tr>
<td>1 hour</td>
</tr>
<tr>
<td>1 ½ hours</td>
</tr>
<tr>
<td>2 hours</td>
</tr>
</tbody>
</table>
PART FOUR: COMMUNICATION

1. How good do you consider communication between general practitioners/pharmacists and homoeopaths to be?
   - Non-existent
   - Poor
   - Moderate
   - Good
   - Very good

2. How good do you consider co-operation between general practitioners/pharmacists and homoeopaths to be?
   - Non-existent
   - Poor
   - Moderate
   - Good
   - Very good

3. Do you think improved communication and co-operation between general practitioners/pharmacists and homoeopaths would be a benefit to patients?
   - Yes
   - No
   - Unsure

4. Have you ever referred a patient to a homoeopath?
   - Yes
   - No
   - Unsure

5. Has a homoeopath ever referred a patient to you?
   - Yes
   - No
   - Unsure

6. Would you give feedback on a referred patient to a homoeopath?
   - Yes
   - No
   - Unsure
7. Would you like feedback on a referred patient from a homoeopath?
   - Yes
   - No
   - Unsure
   If no, why not? ________________________________________________________________

8. If you refer a patient to a homoeopath and the case remains unresolved after homoeopathic treatment, what do you expect of the homoeopath?
   - Refer the patient back
   - Refer to a specialist physician
   - Decide on further action together

9. If a homoeopath refers a patient to you and the case remains unresolved after your treatment, what would you do?
   - Refer the patient back
   - Refer to a specialist physician
   - Decide on further action together

10. Do you think co-operation between general practitioners/pharmacists and homoeopaths will be beneficial to:
    - The patient
    - The homoeopath
    - The general practitioner
    - The pharmacist
    - All of the above parties
    Why? __________________________________________________________

11. Do you think homoeopaths are skilled medical practitioners?
    - Yes
    - No
    - Unsure

12. Do you practice, prescribe or recommend any type of complementary medicine?
    - Yes
    - No
    If yes, please specify: ________________________________________________
13. Which of the following best reflects your view of homoeopathy?

<table>
<thead>
<tr>
<th>Option</th>
</tr>
</thead>
<tbody>
<tr>
<td>I am uncomfortable with it, but it is effective for some patients</td>
</tr>
<tr>
<td>It is an excellent mode of treatment</td>
</tr>
<tr>
<td>It is quackery and does more harm than good</td>
</tr>
<tr>
<td>I am not informed enough to comment</td>
</tr>
</tbody>
</table>

Thank you for participating in this survey.
Appendix C

Faculty of Health Sciences

2005

Department of Homoeopathy
SYLLABI

ANATOMY I: 1503119120 (ANTY102)

1. YEAR MARK AND EXAMINATION
   (a) The year mark shall be made up of:
       The average of 3 theory tests,
       2 practical tests and 1 oral - 100%
   (b) The examination shall consist of two 3-hour theory papers, one practical examination and one oral examination.

2. THEORY AND PRACTICAL
   1. Introduction to anatomy
   2. How to dissect
   3. Anatomical and medical terminology
   4. Histology
   5. Thorax
   6. Abdomen
   7. Pelvis/perineum
   8. Radiological anatomy
   9. Topographical Anatomy
   10. Static palpation

ANATOMY II 1503147220 (ANAT202)

1. YEAR MARK AND EXAMINATION
   (a) The year mark shall be made up of:
       The average of 3 theory tests,
       2 practical tests and 1 oral - 100%
   (b) The examination shall consist of two 3-hour theory papers, one practical examination and one oral examination.

2. THEORY AND PRACTICAL
   1. Neuro-anatomy
   2. Head and neck
   3. Back
   4. Upper limb
   5. Lower limb
   6. Histology

AUXILIARY THERAPEUTICS III 0902164030 (ACTH302)

1. YEAR MARK AND EXAMINATION
   The year mark shall be made up of:
   (i) Average of theory tests and assignment results - 60%
   (ii) Average of practical tests - 40%
   The examination shall consist of one 3-hour theory paper and one 30-minute practical. A minimum of 20% of the students will be moderated in the practical examination.

2. THEORY AND PRACTICAL
   1. Physiological therapeutics and their application in practice
   2. Pain mechanisms
   3. Transcutaneous electric nerve stimulation (TENS)
   4. Thermotherapy
   5. Cryotherapy
   6. Low frequency currents
7. Actinotherapy
8. Medium frequency currents
9. Cold (soft) laser
10. Massage
11. Meridian therapy
12. Stress management
13. Hydrotherapy

BIOCHEMISTRY II 1504112220 (BCHE202)
1. YEAR MARK AND EXAMINATION
   (a) The year mark shall be made up of:
      (i) Theory tests - average of two 2-hour tests - 67%
      (ii) Practical mark based on average:
            practical mark - 50%
            practical tests - 50%
   (b) The examination shall consist of one 3-hour theory paper

2. THEORY AND PRACTICAL
   1. Amino acids and peptides
   2. Proteins
   3. Haemoglobin
   4. Enzymes
   5. Biological oxidation
   6. Carbohydrates
   7. Lipids
   8. Membranes
   9. Metabolism of nucleotides and nucleic acids
   10. DNA
   11. RNA
   12. Protein synthesis and the genetic code
   13. Amino acid metabolism
   14. Nutrition

BIOLOGY II 1503127120 (BIOG102)
1. YEAR MARK AND EXAMINATION
   (a) The year mark shall be made up of:
      (i) Theory tests average of three 2-hour tests - 75%
      (ii) Practical mark based on:
            average practical mark - 50%
            practical test - 50%
   (b) The examination shall consist of one 3-hour theory paper

2. THEORY AND PRACTICAL
   1. The scope of biology
   2. Characteristics of cells
   3. Multicellular organisation
   4. Energy transformation and nutrient procurement
   5. Gaseous exchange
   6. Internal transport
   7. Regulation of body fluids
   8. Hormonal control
   9. Nervous control, sensory reception and effectors
10. Cellular reproduction and inheritance
11. Reproduction and development
12. Evolution
13. Ecology
14. Origin of life, viruses and monera
15. The Protistan Kingdom
16. The Plant Kingdom
17. The Fungal Kingdom
18. The Animal Kingdom

CHEMISTRY I 1504171120 (CHHC102)
1. YEAR MARK AND EXAMINATION
   (a) The year mark shall be made up of:
      (i) Theory tests - 4 tests - average of best 3 - 50%
      (ii) Practical mark based on average of
            2 theory of practical tests 25%
            2 practical tests 25% - 50%
   (b) The examination shall consist of one 3-hour theory paper

2. THEORY AND PRACTICAL
   1. Matter and energy
   2. Chemical equations and stoichiometry
   3. Solutions
   4. Acids, bases and salts
   5. Chemical reactions
   6. Chemical equilibrium
   7. Electrochemistry and Redox theory,
   8. Chemistry of selected elements (H, N, S)
   9. Organic chemistry

CLINICAL HOMEOPATHY IV 090400406 (CHOM401)
1. YEAR MARK AND EXAMINATION
   (a) The year mark shall consist of the average of:
      (i) Three 3-hour written tests
      (ii) A mark based on clinic reports submitted throughout the year
   (b) The examination shall consist of one 3-hour theory paper

2. THEORY AND PRACTICAL
   1. The principles and theories of Homoeopathy, Naturopathy, Herbalism and Allopathy
   2. Reductionism and holism
   3. The law of similars, Hering's law of cure & Aamd-Schultz law
   4. Theory of chronic disease, constitutional types and their clinical application
   5. Case-taking, prescribing, follow-up and progressive response
   6. Contra-indications for treatment/therapies, tests, reports and patient referral
   7. Rational treatment programmes, clinic procedures
   8. Prognosis, therapeutic procedures
   9. Correlation of anatomy, diagnostics, case-taking and other subjects relative to treatment procedures
   10. Inherited and environmental factors to be considered in relation to patient treatment
1. **YEAR MARK AND EXAMINATION**
   (a) The year mark will be calculated from the following assessments:
   (i) 4 Theory tests
   (ii) clinic entrance examination, clinic mid-year examination and continued evaluation which consists of Case evaluations and Clinic evaluations
   (b) The examination shall consist of one 3-hour theory paper, and two practical examinations (case evaluation and OSCE).

2. **THEORY AND PRACTICAL**
   1. Differential diagnosis
   2. Nutrition
   3. Cure, palliation/susceptibility, resistance and the self-healing ability of the body
   4. Life-style/stress/patient’s responsibility and health education
   5. Ecological interdependence
   6. Naturopathic therapies
   7. Practical applications in the community
   8. Patient contact
   9. Historical and tribal customs relating to the health care system
   10. Epidemic and endemic factors
   11. Regulatory factors
   12. Practical application of professional skills

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**DIAGNOSTICS III 0901079030 (DIAG301)**

1. **YEAR MARK AND EXAMINATION**
   (a) The year mark shall be made up of:
   (i) Average of theory tests 60%
   (ii) Average of practical tests 40%
   (b) The examination shall consist of one 3-hour theory paper (P1) and one 30-minute practical (P2).
   (c) A minimum of 20% of the students will be moderated in the practical examination.

2. **THEORY AND PRACTICAL**
   1. The nature, types, advantages and limitations of diagnoses.
   2. The case history.
   3. The theory and practice of the physical examination.
   4. The use of standard diagnostic instrumentation.
   5. The psychiatric examination.
   6. The analysis of symptoms and signs.
   7. The general and external features of disease.
   8. The nervous system.
   9. The locomotor system.
   10. The cardiovascular system.
   11. The respiratory system.
   12. The alimentary system.
   13. The genito-urinary system.
   14. The endocrine system.
   15. The reticulo-endothelial system.
   17. Paediatrics.
   18. Geriatrics.
1. **YEAR MARK AND EXAMINATION**
   
   (a) The year mark shall be made up of:
       
       (i) The average of theory tests - 40%
       
       (ii) The average of practical tests based on clinical skills - 60%
       
   (b) The examination shall consist of one 3-hour theory (P1) paper and a practical examination (P2).
   
   (c) A minimum of 20% of the students will be moderated in the practical examination.

2. **THEORY AND PRACTICAL**
   
   1. Clinical pathology
   2. Gynaecology
   3. Obstetrics
   4. Dermatology
   5. Weight loss
   6. Syncope
   7. Vertigo
   8. Dementia
   9. Headache and facial pain
   10. Coma
   11. Pyrexia of unknown origin
   12. Abdominal pain
   13. Haematemesis and malaena
   14. Changes in bowel habit
   15. Jaundice
   16. Nausea and vomiting
   17. Dysphagia
   18. Dyspnoea
   19. Chest pain
   20. Haemoptysis
   21. Cough
   22. Oedema
   23. Polyuria, oliguria, dysuria, haematuria
   24. Anaemia
   25. Haemorrhage
   26. Lymphadenopathy and splenomegally
   27. Claudication
   28. Hepatomegally
   29. Joint pain/stiffness/swelling
   30. Back pain
   31. Neck pain
   32. Muscle weakness
   33. Numbness and paraesthesia
   34. Painful/painless loss of vision.

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**EPIDEMIOLOGY I: 0901062220 (EPHC201)**

1. **YEAR MARK AND EXAMINATION**
   
   (a) The year mark shall be made up of:
       
       (i) Theory tests - average of three tests - 75%
       
       (ii) Practical mark based on average
           
           practical mark - 50%
           
           practical test - 25%
       
   (b) The examination shall consist of one 3-hour theory paper
2. THEORY AND PRACTICAL

Section A - Immunology
1. The functions and components of normal blood
2. Non-acquired body defences
3. Naturally acquired body defences: antigens and antibodies
4. Artificially acquired body defences: immunisation
5. Allergy and auto-immune diseases

Section B - Epidemiological principles
1. The history of public health services
2. Essential epidemiological concepts
3. Virulence of micro-organisms and the infective process
4. Factors in the transmission of communicable diseases

Section C - Epidemiology of infectious diseases
1. Diseases caused by bacteria
2. Diseases caused by viruses
3. Diseases caused by Rickettsiae and Chlamydiae
4. Diseases caused by fungi
5. Sexually transmitted diseases

Section D - Parasitology
1. Introduction to parasitology
2. Protozoan parasites: classification, characterisation & incidence
3. Platyhelminthic parasites: classification, characterisation and incidence
4. Aschelminthic parasites: classification, characterisation and incidence
5. The Arthropoda as parasites, vectors and pests
6. Mammalian pests: rats and mice

GENERAL PATHOLOGY II 0901077220 (GPAT201)
1. YEAR MARK AND EXAMINATION
(a) The year mark shall be made up of:
   (i) Theory tests - average of two 2-hour tests - 67%
   (ii) Practical mark based on:
        average practical mark 50% 33%
        practical test 50%
(b) The examination shall consist of one 3-hour theory paper

2. THEORY AND PRACTICAL
1. Disease at cellular level
2. Fluid and haemodynamic derangements
3. Inflammation, healing and repair
4. Disorders of growth
5. Neoplasia
6. Metabolic diseases; genetic diseases
7. Nutritional disorders
8. Autoimmune diseases
9. Miscellaneous ecological conditions

HOMEOPHARMACEUTICS IV 090401106 (HPHM401)
1. YEAR MARK AND EXAMINATION
(a) The year mark shall be made up of:
   (i) The average of four 3-hour tests
   - average of assignments
(b) The examination shall consist of one 3-hour theory paper and one 3-hour practical paper
2. THEORY AND PRACTICAL
   1. The scope of homoeopharmaceutics
   2. Medicinal and herbal plant characteristics with regard to cultivation, harvesting and storage
   3. Active plant constituents, synthetic equivalents and substituted chemical drugs
   4. Preparation of mother tinctures
   5. Quality control & identification methods (including a shelf-life determination)
   6. Animal, insect & inorganic preparations. Their pharmacological and toxicological action
   7. Types of preparations and methods of preparation
   8. Shelf-life, storage, ageing, bio-availability and iatrogenicity
   9. Legalities and record keeping

MATERIA MEDICA III 090400103 (MMED301)
1. YEAR MARK AND EXAMINATION
   (a) The year mark shall be made up of:
       (i) the average of four 3-hour written tests
   (b) The examination shall consist of one 3-hour theory paper.

2. THEORY AND PRACTICAL
   1. Introduction to the material medica with historical background
   2. Pathogenesis (related to polycrests)
   3. Modalities (symptom qualifications related to polycrests) and causalities (original occurrence of ailment to be treated)
   4. Constitutions.
   5. Source and original prover
   6. Symptomatology of the polycrests
   7. Synergistic & complementary remedies, prescribing techniques
   8. Introduction to the miasmic medicaments and present-day new miasmatic tendencies
   9. Classification and characteristics of the miasmic medicaments
   10. Miasmatic treatment, repetition and patient reaction

MATERIA MEDICA IV 090400306 (MMED401)
1. YEAR MARK AND EXAMINATION
   (a) The year mark shall be made up of:
       (i) theory tests average of four tests
         (ii) average of assignments
   (b) The examination shall consist of one 3-hour theory paper.

2. THEORY AND PRACTICAL
   1. Further selected remedies including miasmatic, biotherapeutic and modern remedies
   2. Use of the repertory and the importance of compatibility cross-checks and complementary prescribing variations
   3. Comparative study of herbal material medica and homeopathic medicines
   4. Allopathic pharmacological functions of medicaments mentioned in the various pharmacopoeias (herbal, homoeopathic and allopathic)

MATERIA MEDICA V 090400103 (MMED301)
1. YEAR MARK AND EXAMINATION
   (a) The year mark shall be made up of:
       (i) Theory mark based on - average of four tests
           - average of assignments
   (b) The examination shall consist of one 3-hour theory paper.
2. THEORY AND PRACTICAL
1. Detailed use of the repertory
2. Practical application of repertory
3. Repertorising selected case histories
4. Computers in Homoeopathy
5. Card system
6. Classical system
7. French pluralism
8. Local approach to the practicalities of repertorising and selecting the most suitable medicaments
9. Clinical applications of repertorising and medical diagnosis
10. Practical application of homoeopathy with emphasis on observation and patient reactability, aggravation and palliation
11. Total assessment of patients

MEDICAL MICROBIOLOGY II 1503161220 (MMIC201)

1. YEAR MARK AND EXAMINATION
   (a) The year mark shall be made up of:
      (i) Theory tests average of 2 tests 50%
      (ii) Practical tests average of 2 tests 50%
   The examination shall consist of one 3-hour theory paper.

2. THEORY AND PRACTICAL
   1. The scope of microbiology.
   2. Characteristics and types of bacteria.
   3. Characteristics of protozoa, yeasts and moulds.
   4. Laboratory study of bacteria.
   5. Characteristics of Rickettsiae, Chlamydiae and Mycoplasmas.
   7. General bacterial physiology.
   8. Micro-organisms in the ecological system.
   9. Basic principles of sterilisation and disinfection.
   10. Antimicrobial agents and chemotherapy.

PHILOSOPHY, PRINCIPLES & HISTORY I 180101612

Module 1 (PPHS11)

1. SEMESTER MARK AND EXAMINATION
   (a) The year mark shall be made up of:
      Theory tests - average of 2 tests 100%
   (b) The examination shall consist of one 2-hour theory paper.

2. THEORY
   1. Health and disease
   2. The evolution of medical thought
   3. Samuel Hahnemann
   4. Principles of Homoeopathy
   5. Potency
   6. Susceptibility
   7. Man as an integrated totality
   8. The position of Homoeopathy in modern Science
Module 2 (PPHS121)
1. SEMESTER MARK AND EXAMINATION
   (a) The final mark shall be made up of:
      (i) theory tests - 50%
      (ii) assignment - 50%

2. THEORY
   1. Application of Homoeopathic philosophy and principles
   2. Materia Medica of First-Aid remedies
   3. Practical prescription in First-Aid contexts.

PHYSICS I 150105120 (PHHC101)
1. YEAR MARK AND EXAMINATION
   (a) The year mark shall be made up of:
      (i) Theory tests- average of three 1-hour tests 75%
      (ii) Practical mark based on average practical mark 25%
   (b) The examination shall consist of one 3-hour theory paper.

2. THEORY AND PRACTICAL
   1. Remedial mathematics
   2. Fundamental units and conversion of units
   3. Vectors and scalars
   4. Kinetics
   5. Mechanics
   6. Dynamics
   7. Momentum
   8. Moments
   9. Work, energy and power
   10. Applied mechanics
   11. Density and relative density
   12. Pressure
   13. Thermodynamics, internal energy and heat
   14. Mechanical properties of materials
   15. Waves and sound
   16. Optics
   17. Electricity
   18. Magnetism and electro-magnetic induction
   19. Radioactivity

PHYSIOLOGY I 1503120120 (PHSY101)
1. YEAR MARK AND EXAMINATION
   (a) The year mark shall be made up of:
      (i) Theory tests - average of two 2-hour tests 67%
      (ii) Practical mark based on: average practical mark 50%
            practical test 50%
   (b) The examination shall consist of one 3-hour theory paper.

2. THEORY AND PRACTICAL
   1. Organisation of the body
   2. The cell
   3. Tissues
   4. Integumentary system
   5. Skeletal system
6. Muscular system
7. Nervous system
8. Sense organs
9. Endocrine system
10. The heart
11. Circulation
12. Lymphatic system
13. Respiration
14. Digestive system
15. Urinary system
16. Body fluid electrolyte and pH balance
17. Reproduction and development

PHYSIOLOGY II 1503097220 (PHSI201)

1. YEAR MARK AND EXAMINATION

(a) The year mark shall be made up of:
   (i) Theory tests - average of three 3-hour tests - 75%
   Practical mark based on
   average practical mark 50% - 25%
   Practical examination 50%

(b) The examination shall consist of one 3-hour theory paper.

2. THEORY AND PRACTICAL

1. Functional organisation of the human body and control of the internal environment
2. The cell
3. Nerve and muscle
4. Cardiovascular system
5. The kidneys and body fluid homeostasis
6. Respiration
7. The nervous system
8. Special senses
9. The gastro-intestinal tract
10. Energy balance, metabolism and nutrition
11. Endocrinology
12. Reproduction

PRACTICE MANAGEMENT & JURISPRUDENCE V 130800212 (PMJU501)

1. YEAR MARK AND EXAMINATION

(a) The year mark shall be made up of:
   (i) Theory tests - average

(b) The examination shall consist of one 3-hour theory paper.

2. THEORY AND PRACTICAL

1. Practice Management
2. Jurisprudence
3. Legislation relative to the profession
PSYCHOPATHOLOGY II 0902158220 (PHYP201)

1. YEAR MARK AND EXAMINATION
   (a) The year mark shall be made up of:
      (i) Theory tests - averaging major tests 60%
           average of assignments 40%
   (b) The examination shall consist of one 3-hour theory paper.

2. THEORY AND PRACTICAL
   1. Introduction to psychopathology.
   2. Abnormal behaviour.
   3. Specific disorders: psychoses; neuroses
   5. Other psychiatric disorders.
   6. Patient-practitioner relationships.
   7. Assessment and treatment approaches.

RESEARCH METHODS & TECHNIQUES I 150308412 (RMHO102)

Continuous assessment
1. The final mark is made up as follows:
   a) Statistics tests 20%
   b) Research methodology test 20%
   c) Submission of DIT 186 60%

2. THEORY
   1. Statistics
   2. Definitions and terminology
   3. Interpretation of statistics
   4. Organising data
   5. Measures of Central Tendency
   6. Measures of Dispersion
   7. Probability distributions
   8. Gathering statistical information
   9. Sampling Distributions
   10. Estimation
   11. Hypothesis testing
   12. Linear regression and correlation
   13. One-way Analysis of Variance (ANOVA)

The Research Process
1. Basic principles of the research process is taught
2. Eventually a topic to research has to be chosen and a G186 submission to be written which will be marked

SOCIAL STUDIES 2206012120 (SSTU101)

1. YEAR MARK AND EXAMINATION
   (a) The year mark shall be made up of:
      (i) The average of theory tests 50%
      (ii) The average of assignments 50%
   (b) The examination shall consist of one 3-hour theory paper.

2. THEORY
   Section A: Psychology
      1. The nature scope and methods of psychology
      2. Principal approaches in psychology
      3. Developmental psychology
      4. The senses perception and mental processes
5. Learning
6. Social influence

Section B: Sociology
7. The nature, scope and methods of sociology
8. The socialisation process
9. Institutions
10. Social structure
11. Belief systems
12. Social problems

SYSTEMIC PATHOLOGY III 0901100030 (SYPA301)
1. YEAR MARK AND EXAMINATION
(a) The year mark shall be made up of:
   (i) Theory tests - average of 3 tests 75%
   Practical mark based
      on an average mark 50%
      and a practical examination -25%
   (B) The examination shall consist of one 3-hour theory paper (Pathology) and one 2-hour theory paper (Pharmacology) with a 40% sub-minimum examination mark requirement for each paper.
2. THEORY AND PRACTICAL
   Pathological conditions associated with:
   1. The vascular system
   2. The heart
   3. Haematopoietic and lymphoid systems
   4. The respiratory system
   5. Urinary system
   6. The gastrointestinal tract
   7. The liver, the biliary tract and the pancreas
   8. The male genital system
   9. The female genital system and breast
   10. The endocrine system
   11. The musculoskeletal system
   12. The nervous system