

THE PERCEPTIONS OF MEDICAL PRACTITIONERS WITH REGARD TO
COMPLEMENTARY MEDICINE IN HEALTH CARE IN SOUTH AFRICA

BY

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Dissertation submitted in partial compliance with the requirements for the Masters Degree
in Technology: Homoeopathy in the faculty of Health at Technikon Natal.

I, REENA SUKDEV, do declare that this dissertation is representative of my own work.

25-3-98

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30/3/1998

DEDICATION.

To my parents, Shanti and Ganas Sukdev, for their endless love, support, guidance and patience.

To my sisters - Shareen and Simla.

To my brother - Krishen.

ACKNOWLEDGEMENTS:

I would like to express my gratitude to:

- Dr. F. J. Burger for his guidance as my supervisor.
- Mr. Z. Worku for his help in statistical evaluation.
- to all medical practitioners who participated in the study - thank you.

ABSTRACT

The aim of this investigation was to determine the perception of medical practitioners with regard to complementary medicine in health care in South Africa. This involved establishing medical practitioners attitude, as well as their experience and knowledge of complementary medicine: homeopathy, chiropractic, acupuncture, ayurvedic medicine, herbalism, reflexology, aromatherapy and osteopathy.

A questionnaire with a cover letter was drawn up. The first section was designed to elicit information on demographic and other background characteristics. The rest of the questions were designed to obtain data on the medical practitioners knowledge of complementary medicine(CM) and the role that CM plays in health care in S.A.

A list of medical practitioners working in the central urban areas of Johannesburg, Cape Town, Durban, Bloemfontein, East London and Port Elizabeth were obtained from telephone directories. One thousand questionnaires were posted to a random sample in these areas. A response rate of 32.2% was obtained.

In general it appears that medical practitioners knowledge on the individual Complementary medicine are limited and this was also one of the reasons why very few medical practitioners incorporate CM in their practice. More knowledge(59.3%) and proof of efficacy(73.9%) appear to be factors that might encourage the use of CM in the

future. The clarity on legal aspects was indicated by a small percentage(14%) as a factor that might encourage the use of CM in the future. There appears to be still limited co-operation between the professions as there seems to be very little referrals to Complementary therapists. The majority of medical practitioners see CM as a form of supportive therapy (75.50%) and only 14% see CM as a form of primary therapy.

In the final chapter several important recommendations are made to all practitioners-both complementary and medical- interested in the future development of health care in South Africa.

It is important to emphasise that the completion of questionnaires was done during the year 1995 .This is the first and I hope that a similar study will be undertaken in the year 2000 to be used as a comparative study assessing the perceptions of medical practitioners towards CM.

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CHAPTER ONE : INTRODUCTION

A most striking feature is complementary medicine's (CM) immense and continuously growing popularity. In Europe 'natural medicine's' increase each year by 3.5% (Ernst 1994).

Many British medical practitioners now feel that the integration of some aspects of CM into their practice would be desirable and helpful for their patients, characteristically the younger doctors are more open minded than the older generation (Ernst 1994).

A study sponsored by the Netherlands Ministry of Welfare, Public Health and Cultural Affairs was conducted amongst 293 medical practitioners in the Netherlands which showed that many Dutch medical practitioners believe in the efficacy of common alternative procedures (Knipschild et al 1990).

In South Africa, research was conducted by Steenkamp(1985) to determine the public's attitude towards, as well as experience and knowledge of associated health service occupations, namely chiropractic and homeopathy. It was found that patients of chiropractors and homeopaths were more satisfied with the approach and treatment by their doctors than were the patients of allopathic with theirs. Both chiropractors and

homeopaths completely cured a considerable proportion of patients who previously often or repeatedly consulted allopathic practitioners.

There is a world crisis in health care. The dominance of the medical profession in South African Health Care established specific priorities and emphasised and modelled care delivery structures to suit its own professional interests often neglecting and even ousting those kinds of care which the country and its people need more and which in many cases have been more appropriate(Yach 1994).

It is essential to explore alternative models of care and other categories of health care providers into South African Health Care.

Since the April elections in 1994, a new government of national unity came into power. We now have a new minister of health and a new national health care system has emerged. Priorities have shifted to make primary health care more accessible.

The pattern of co-operation between medical and complementary practitioners in the future is an issue of considerable importance. There is a great need for an improvement of their understanding of each others practices and how best to relate jointly to patients. In keeping with the rapidly changing South African environment on 11th October 1994, an historic decision, the South African Medical and Dental Council removed rule 7(2) from its regulations and in so doing removed all restrictions on co-operation between the homeopathic, chiropractic and the medical profession(Milani 1994).

This was a wonderful breakthrough and would open doors and new opportunities for inter-professional relationships.

The real excitement and potential of the country and its people depends on South Africa not only showing the world the forward politically but also taking the opportunity to show the world the way forward in medicine knowing full well the diversity of our professions. Medical and complementary practitioners can make their most effective contribution to the needs of the people through team effort - and will push forward the revolution currently taking place in the whole of health care.

The moment seems right to explore the attitude amongst medical practitioners towards CM as very little information on the perceptions of medical practitioners towards CM is available. The information obtained by this survey will contribute to the knowledge of health services rendered by CM practitioners in South Africa. Therefore the purpose of this investigation is to determine the perception of medical practitioners with regard to the role of CM in health care in South Africa.

CHAPTER 2: REVIEW OF RELATED LITERATURE

In the last 25 years interest in complementary medicine has increased steadily, and has been especially rapid over the last decade. This steady growth of interest has also led to an increase in research into the efficacy of complementary medicine and people's changing attitudes towards it.

The reasons for this increased interest and use of complementary medicine are not well understood. Some people may have been dissatisfied with orthodox medicine, rejecting its reliance on high technology, wary of the dangers of invasive techniques and the toxicity of many drugs; others may retain a belief in the value and effectiveness of orthodox medicine at least in certain areas, and yet find some aspects of complementary medicine attractive. The popularity of complementary medicine appears to be more than just a discontent with the existing medical profession. An increasing number also see complementary medicine as an avant-garde for new ideas about health and the body. Discussions of complementary medicine in the medical literature frequently centre around questions of efficacy. (Vincent and Furnham 1994.)

2.1. Research Council for Complementary Medicine (Monckton 1994).

The tenth anniversary colloquium of the research council for complementary medicine(RCCM) held at the Royal Society of Medicine on 16 June 1993 took place in order to explore the issues associated with complementary medical research.

Complementary medicine is often awash with misconceptions, misunderstandings and preconceived judgements, and all involved lose out as a result. The research Council was established in 1983 in response to the increasing public demand for greater access to what had for years been insufficiently regulated therapeutic practices.

Some of the questions raised then were:

- * Can the overload in the primary health care area be shared with properly qualified and accredited complementary practitioners?
- * How can establishment medicine be persuaded that scientific investigation of complementary medicine is in everyone's interest?
- * Should we lobby for a specific fraction of existing research funds from Government sources to be allocated to complementary medical research(Monckton 1994).

2.2. United States(US) perspective (Monckton 1994).

In the USA the United States Senate Appropriations Sub Committee for the National Institutes of Health (NIH) added the following to its budget plans for 1992.

Unconventional Medical Practices:

The committee is not satisfied that the conventional medical community as symbolised by the NIH has fully explored the potential that exists in unconventional medical practices. In order to more adequately explore these unconventional medical practices the Committee requests that the NIH establish within the office of the Director an office to fully investigate and validate these practices. The committee further directs that the NIH convene and establish an advisory panel to screen and select the procedures for investigation and to recommend a research programme to fully test the most promising unconventional medical practices.

The Office of Alternative Medicine has developed several functions.

These include:

1. Serving as a broker between the alternative community and the orthodox medical community.
2. Providing technical assistance to the alternative community.
3. Being a clearing house for information relating to alternative medicine.
4. Carrying out investigations to determine the relative clinical benefits of a purported treatment.
5. The offering of a small grant for research.
6. Establishing a programme advisory council.

The public response in the US to the creation of the office for Alternative Medicine at the NIH has been nothing less than phenomenal. A tremendous shift is taking place in the relationship between complementary and orthodox medicine. The US Government believe that this change can only be mitigated in a positive way if they explore clinical evaluation of Complementary Medicine in a methodical , dispassionate manner, devoid of politics and bias.

The activities of Alternative Health are being carried out in a changing care environment in the US. The emergence of alternative medicine as a major factor is one of 'multiple revolutions ' facing US medicine.

2.3. The European perspective

In Germany , there is no separate unconventional and conventional medical research. Just as in the UK , under common law all are free to seek help from whoever they wish, so in Germany , there is the concept of the 'therapeutic freedom' that allows the individual the right to choose whatever form of therapy desired.

Until recently, there were two projects concerned with research into complementary medicine in Germany received 15 million deutsch marks (16 Million Pounds). One was concerned with cancer research and the other was concerned with the broad spectrum of

Complementary Therapies. Ten million deutsch marks are planned for the next 2 years to support these two projects(Monckton 1994).

A most striking feature is Complimentary Medicines immense and continuously growing popularity. Many British medical practitioners now feel that the integration of some aspects of CM into their practice would be desirable and helpful for their patients; characteristically the younger doctors are more open-minded than the older generation. (Ernst 1994).

Questionnaire studies in the UK have examined the attitudes of orthodox medical students and practitioners and found high rates of interest and knowledge, the referral of patients to complimentary medicine(Vincent and Furnham 1994.)

In 1982 doctors at the Scottish National General Practitioner Trainee conference revealed in an anonymous questionnaire that although it was not as yet a professionally accepted topic they were privately interested in alternative medicine Five years on the views of a similar audience was resampled - by then that subject had changed its name to complementary medicine. Compared to their colleagues of 5 years before - just as many thought CM to be useful - 92% overall with 72% saying that they had seen patients benefiting (Reilly and Taylor 1993.)

A study sponsored by the Netherlands Ministry of Welfare, Public Health and Cultural Affairs was conducted amongst 293 general practitioners in the Netherlands , which showed that many Dutch GP's believe in the efficacy of common alternative procedures . (Knipschild et al .)

2 .4 . The Indian perspective(Izhar 1990).

In India , different medical systems have existed for centuries. Present Indian government policy has emphasised effective integration of modern allopathic and traditional medical systems. Present government Policy at both central and state levels encourages the spread of all forms of medicine into every region of the country.

The Alligarh Muslim University has both Unani and Allopathic Medical Colleges and a modern allopathic clinic on campus , from which students may obtain free medical care.

2 .5 . The World Health Organisation (Monckton 1994).

The World Health Organisation (WHO) is currently drawing up guidelines for clinical trials into acupuncture and has recently completed the final draft of its guidelines for clinical trials into herbalism. Drawing on experts from different countries , these initiative

will help determine the future direction of CM and any potential acceptance by orthodox medicine .

There is a reluctance on the part of practitioners to become involved in research. Apart from the obvious demands of running a private clinic, practitioners sometimes feel that research will in some way put their therapy under threat .

2 .6 . Crisis in health care

There is world-wide concern about the crisis in health care. While the nature and extent of this concern vary between countries , there are several concerns common to all. These include the rising cost of healthcare , the continued perception that the medical profession emphasises curative care , failure to consider the broader medical community in deciding health policy at both national and local level , the low priority given to preventative and promotive services in most countries , the result is that policies are often implemented which directly impedes improvements in health. (Yach 1994).

2 .7 . The health status of South Africans(Yach 1994).

Overall, the picture is one of a high number of preventable deaths, diseases and disabilities that particularly affect children, simultaneously there is a high occurrence of behaviours

that place the population at long term risk for an increasing incidence of chronic diseases and trauma.

2 . 7 . 1 . Infant mortality rate (IMR)

In South Africa both race and regional variations exist with regard to the IMR e.g. there is a 10-fold variation in the IMR between whites and blacks.

2 . 7 . 2 . Excess mortality by race and gender

There is an almost 9-fold excess of deaths among black children under 5 years relative to whites. This drops to a 2 1/2 to 3 fold excess until about 50 years of age, and after that drops back to around 1 1/2 fold.

The excess mortality in early childhood is predominantly due to the most highly preventable causes of death, namely diarrhoea, acute respiratory infections, pneumonia, nutritional deficiencies and measles.

In 15 - 50 year olds, the excess is due particularly to TB, trauma and chronic diseases such as diabetes and hypertension. In black and coloured women of child bearing age, septic abortions play a key role in the excess.

2 . 7 . 3 . Infectious diseases

The most important notifiable disease is TB. Approx. 100 000 new cases occur annually, of which 80 000 are notified. The figure has not varied much over the last few years.

Between 15% and 50% of children in diverse settings are heavily infected with parasites.

This infestation substantially contributes to iron deficiency in childhood.

2 . 7 . 4 . Nutritional status

There is no national nutritional surveillance system. The available nutritional status data indicate while there is no problem of acute malnutrition, a large sector of the population is vulnerable with regard to nutrition. For example 8 - 15% of new-borns have a low birthweight, and 25-40% of the population under the age of 5 years are stunted. The high level of stunting places children at risk of subsequent impaired intellectual development and school performance.

2 . 7 . 5. Mental health

In South Africa there has been little rigorous research into the true extent of the problem of mental disorders. It is likely to be substantial and represent a confluence of the high

pressure of socio- political change and violence that has taken its toll on the mental health status of all South Africans, particularly children and adolescents.

2 . 7. 6 . Human immunodeficiency virus (HIV) / Acquired immunodeficiency syndrome (AIDS)

We currently have about 350 000 to 400 000 HIV- infected people in our country. Aids will pose a major threat to the health service and importantly to the economy by the end of this century and will into the next. The response (including public , private and non-governmental organisations) has not matched the extent of the problem.

The World Bank recently put SA's health status relative to its income into the worst category in the world along with Gabon. To understand why, we must recognise that it is how a country spends its resources, and not how much, that determines health status as there is an over emphasis on doing the wrong things. Overall use of the least cost-effective measures is wide-spread.

2 . 8 . A need for re-organisation

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. The result is an alarming lack of synchronisation and co-ordination in South African health care- both among the various composing parts

of a structurally fragmented health care system, and between the 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).

Entirely new ways of thinking and progressive measures appear to be imperative- a refocusing of prevailing policies with a concomitant reorganisation of existing structures of health care - also appears necessary, so as to render services and facilities more available, affordable, accessible and acceptable for the entire clientele, but also rendering them less fragmented , more co-ordinated and more effective in their functioning. This clearly means curtailing the roles played in the health care system by apartheid, and the medical profession in particular. It would subsequently be a prerequisite to explore new value - orientations, new policy frameworks and measures, alternative models of care providers which will be able to incorporate easier access, greater relevance and more acceptance into South African health care(Van Rensburg and Fourie 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. But times are changing. Patients , governments, and third party payers are challenging medical decisions as never before.

The efficacy, cost-efficiency and necessity of many health interventions are being questioned (Green and Atkinson 1994.)

2 . 9. Need for co-operation between orthodox medicine and CM in health care

Our rapidly changing Southern African environment demands that organisations and institutions continually re-position themselves in order to remain both relevant and effective.

The paternalistic command and control - or authority model, has been relegated to history and is rapidly being replaced by a more open and participatory model of interaction. The medical profession needs to take cognisance of this shift.

In keeping with the principles of holistic medicine the doctor should recognise that the patient is a whole and intricate person, the understanding of whose needs will assist in determining the best medical option.

Inclusiveness is another major societal shift in progress. It is clearly related to the greater emphasis on openness, participation and joint decision making. The narrow, exclusive and admittedly more selfish approach to business and other enterprise is no longer the trend, which is towards greater inclusiveness and social responsibility.

The implication of this attitudinal shift will primarily impact on resource allocation decisions by our democratic and more inclusive government. This approach to health care

is rooted in the principle of justice for all. It adds a dimension for utilitarianism, which considers the greatest good for the greatest number - health care for all (Kruger 1993).

The pattern of co-operation between doctors and complementary practitioners in the future is an issue of considerable importance. There is a great need for an improvement of their understanding of each other's practice and how best to relate jointly to patients.

The moment seems right for throwing the confrontational attitude overboard, seek ways of mutual information and integration (Ernst 1994). The primary aim of medical practitioners should be the promotion and preservation of health. The days of individual isolationism in medical practice is past. Medical and CM practitioners can make their most effective contribution to the needs of the people through group or team practice. Medical practitioners form only part of the health care scheme, but only the medical practitioners can wield such heavy influence as to eliminate the co-operation of CM practitioners in the primary health care scheme e.g. in hospitals and clinics.

The moment seems right to explore the shifts in attitude amongst medical practitioners towards CM. As very little information is available on this matter the information obtained from this survey will contribute to the knowledge on health services rendered by CM practitioners in AS especially since they are united in a common goal - HEALTH CARE FOR THE PATIENT. Therefore the purpose of this investigation is to determine the perception of medical practitioners with regard to the role of CM in health care in

South Africa.

CHAPTER 3: MATERIALS AND METHODS:

3.1. Study design.

The first step was the design of the questionnaire(Appendix C). Since a survey of this nature was never attempted before in South Africa, questions were designed with the assistance of past surveys published in various journal articles. Questions from a study to determine the attitudes of veterinarians in the United Kingdom(UK) was used (Kayne and McGuire 1993). Questions were also used from the results of a research study done in the UK aimed at examining the perceived efficacy of five different types of alternative medicine (acupuncture, herbalism, homeopathy, hypnosis, and osteopathy) and orthodox medicine in treating twenty five common complaints ranging from cancer to common cold (Vincent and Furnham 1994). Questions relating to the demographical analysis and to health care was formulated with the assistance of a study of the attitudes of private general practitioners towards health care in South Africa (Volmink et al1993). Questions were used from a study done on doctors at the Scottish National General Practitioner Trainee Conference on their views on CM. This study was done in 1987, five years after a similar study had been done in 1982 to assess the changing attitudes (Reilly and Taylor 1993).

In this questionnaire, complementary medicine incorporated homeopathy, chiropractic, acupuncture, ayurveda, herbalism, reflexology, aromatherapy and osteopathy.

The first section of the questionnaire was designed to elicit information on demographic and other background characteristics. The rest of the questions were designed to obtain data on the medical practitioner's knowledge of CM and the role which CM plays in the health care in South Africa.

The questionnaire (including cover letter and instruction sheet) was pretested on five practitioners . After the pretest, the necessary corrections were made.

Unfortunately, due to a technical error acupuncture was not included in questions 16; 18 and 19. Osteopathy was not included in questions 9 and 19. It is recommended that these be included in future questionnaires.

A list of medical practitioners practising in Johannesburg, Cape Town, Durban, Bloemfontein, East London and Port Elizabeth was obtained from telephone directories. This added up to a total of four thousand three hundred and ninety practitioners with the breakdown being as follows:-

Johannesburg	1600
Cape Town	1353
Durban	800
Port Elizabeth	317
Bloemfontein	178
East London	<u>142</u>
	<u>4390</u>

A sample of 1000 practitioners was needed and this was obtained from the different regions by the following calculations to obtain proportional numbers :-

Johannesburg - 1600 divided by 4390 x 100 = 36.46%.....	364
Cape Town - 1353 divided by 4390 x 100 = 30.82%.....	308
Durban - 800 divided by 4390 x 100 = 18.22%.....	182
Port Elizabeth - 317 divided by 4390 x 100 = 7.22%.....	72
Bloemfontein - 178 divided by 4390 x 100 = 4,05%.....	42
East London - 142 divided by 4390 x 100 = 3.23%.....	<u>32</u>
	<u>1000</u>

The sample size of the study was 1000. The population size was 4390. The sample, therefore, covered almost 23 percent of the population of study. This size was large enough for suitable parametric tests (Cochran1977) .

There were six major cities in the study. A complete list of medical practitioners was prepared from telephone directories for all 4390 practitioners, a random sample of size 1000 was drawn randomly. To identify units in the sample, the table of random numbers was used. The random numbers themselves was generated by a computer. Techniques of

simple random sampling were used to draw the sample from the population. Thereafter, every practitioner chosen was telephoned only to obtain the correct postal address.

This method was necessary because :-

- (i)records of the listing of medical practitioners by the South African medical and dental council (SAMDC) were not up to date (it contained a list of practitioners who had either retired or who were deceased.)
- (ii)records of the listing of medical practitioners by the SAMDC did not include the names of newly qualified practitioners.
- (iii) the list by the SAMDC did not always contain the correct postal addresses of medical practitioners.
- (iv) the listing by SAMDC did not have a breakdown of practitioners in the different provinces, they only provided an alphabetical listing of practitioners.

3.2. Subjects

The survey was limited to medical practitioners registered with the SAMDC.

3.3.Ethics

The study was not subjected to any form of discrimination with regards to the age, sex or race of the practitioner. The answers to the questions were regarded as strictly confidential. Although the questionnaires were addressed to specific practitioners on the cover letter many practitioners chose to remove the cover letter when returning their completed questionnaires in order to remain anonymous and these were accepted as part of the study. It was not the aim of this research to evaluate the psychological and biochemical principles or to compare complementary practice to medical practice nor was it the aim of the study to seek any approval but merely to assess the trends of the attitude and understanding of the medical profession towards complementary medicine.

3.4.Measurement and other observations.

List of variables and their levels -

X1 : Sex

1- female

2- male

X2 : Age in years

1: 24-35 years

2: 36-45 years

3: 46-55 years

4: 56-65 years

5: >65 years

X3 : Province where practice is based

X4 : Educational qualifications

X5 : University at which basic medical qualification was obtained

X6 : Qualifications in complementary medicine

1- yes

2- no

X7 : If yes to Q6, please state them.

X8 : Practice type

1- solo

2- partnership

3- hospital/clinic

4- other

Do you incorporate any of the following complementary medicines in your practice?

X9 : homeopathy: 1-yes

2- no

X10 : manipulation: 1- yes

2- no

X11 : acupuncture: 1- yes

2- no

X12 : ayurveda: 1-yes

2- no

X13 : herbalism: 1- yes

2- no

X14 : reflexology: 1- yes

2- no

X15 : aromatherapy : 1-yes

2- no

How often do you use them?

X16 : on all patients

X17 : on most patients

X18 : on some patients

X19 : Do you wish to continue using them?

1- yes

2- no

How has complementary medicine influenced your practice?

X20 : relearned history taking

X21 : listen more / less dismissive

X22 : now find patient's expectations for NSAID antibiotics, psychotropic difficult

X23 : now want to refer patients

X24 : new outlook on chronic disease

X25 : now see patient as a whole and not as much at cellular / biochemical level

X26 : more aware of patient dissatisfaction with conventional medicine

X27 : rekindled interest in clinical medicine

X28 : find practice richer and more interesting

X29 : did not affect my practice / outlook

X30 : I can do without it

The reason/s you do not incorporate it in your practice

X31 : lack confidence in complementary medicine

X32 : lack self confidence in the application

X33 : never heard of them

X34 : lack knowledge in complementary medicine

X35 : lack of time

X36 : lack of opportunity

X37 : partner's attitude

X38 : lack of opportunity due to patient's resistance

X39 : feel it is of no value

X40 : could be dangerous to the patient

X41 : Do you see yourself including it in future practice?

1- yes

2- no

3- maybe

What factors would you say might encourage the use of complementary medicine in the future/

X42 : more knowledge

X43 : client demand

X44 : proof of efficacy

X45 : nothing would encourage

X46 : clarity on legal aspects

How would you rate the following as a useful form of healing?

1- not effective

2- very effective

X47 : homeopathy

X48 : chiropractic

X49 : ayurveda

X50 : herbalism

X51 : reflexology

X52 : aromatherapy

X53 : osteopathy

How would you rate your knowledge on:

1- know nothing about it/them

2- know everything there is to know about it

X54 : homeopathy

X55 : chiropractic

X56 : acupuncture

X57 : ayurveda

X58 : herbalism

X59 : reflexology

X60 : aromatherapy

X61 : osteopathy

Have you ever referred your patients to a/an:

X62 : homeopath

1- yes

2- no

X63 : chiropractor

1- yes

2- no

X64 : ayurvedic doctor

1- yes

2- no

65 : herbalist

1- yes

2- no

X66 : reflexologist

1- yes

2- no

X67 : aromatherapist

1- yes

2- no

X68 : osteopath

1- yes

2- no

X69 : If yes, specify how frequently.

1- last 6 months

2- last 2 years

3- other

Perceived efficacy of complementary medicine:

X70 : acne

X71 : alcoholism

X72 : allergies

X73 : appendicitis

X74 : arthritis(rheumatoid)

X75 : asthma

X76 : backpain

X77 : bronchitis

X78 : cancer

X79 : common cold

X80 : depression

X81 : diabetes mellitus

X82 : fatigue

X83 : hay fever

X84 : hypertension

X85 : insomnia

X86 : myocardial infarction

X87 : menstrual problems

X88 : migraine

X89 : obesity

X90 : pneumonia

X91 : stopping smoking

X92 : stress

How do you see complementary medicine?

X93 : preventative

X94 : primary therapy

X95 : supportive therapy

X96 : recuperative for illnesses

What kind of validation or evidence do you consider important before you would accept complementary medicine as useful for your patient?

X97 : theoretical scientific basis

X98 : clinical trials

X99 : colleague's experience

X100 : colleague's recommendation

Where did you hear about complementary medicine for the first time?

X101 : this questionnaire

X102 : friends

X103 : literature

X104 : patients

X105 : doctors and supplementary medical people

X106 : other

How much do you use each of the following sources of information to find out about complementary medicine?

X107 : colleagues

1- never

2- sometimes

3- often

X108 : seminars

1- never

2- sometimes

3- often

X109 : television/radio

1- never

2- sometimes

3- often

X110 : scientific books

1- never

2- sometimes

3- often

X111 : journals

1- never

2- sometimes

3- often

X112 : layman’s books

1- never

2- sometimes

3- often

Health care:

X113 : basic health care is a right

X114 : basic health care is a privilege

X115 : comprehensive health care is a right

X116 : complementary medicine should play an active role in the health care system in South Africa

X117 : there is a lack of co-operation in primary health care

X118 : complementary medicine should be included into the syllabus for undergraduates in the medical profession.

3.5.Statistical analysis

3.5.1. The statistical software package Statgraphics was used to process the data from the questionnaires.

3.5.2. All questions were analysed by frequency counts with the results being expressed as percentages.

3.5.3. The Pearson chi-square test for the strength of association between two factors.

Suppose that a random sample of size n is obtained. The observations in the random sample may be classified according to two criteria. Using the first criterion, each observation is associated with one of the rows. Using the second, each observation is associated with one of the c columns.

Let O_{ij} be the number of observations in row i and column j in an r by c contingency table. For each of the tests involving the dichotomous explanatory variables, the number of rows, r , is equal to 2. Also, the number of columns, c , is 2.

The following 2 assumptions are made:

1. The sample of n observations is a random sample. Each observation has the same probability as every other observation of being classified in row i and column j , independently of the other observations.
2. Each observation may be classified into exactly one of r different categories according to one criterion, and into exactly one of c different categories according to a second criterion.

Any two factors that are strongly associated with each other are interdependent. On the other hand, if they are not associated with one another, they are said to be independent.

The test for the independence of two factors A and B can be established by the null hypothesis H_0 as follows:

H_0 : Factors A and B are independent or not strongly associated with each other.

The alternative hypothesis H_1 states the contrary of what the null hypothesis does:

H_1 : Factors A and B are significantly associated with each other.

In the process of testing the null hypothesis, one of two types of errors can be made. Type 1 error is rejecting a true null hypothesis. Type 2 error is accepting a false null hypothesis. The probability of Type 1 error is denoted by alpha. The probability of Type 2 error is denoted by beta. The level of significance of the test is equal to alpha, and in this study, the value of alpha is fixed at the 5% level for all tests.

Decision rule:

At the alpha level of significance,

Reject H_0 if the calculated (observed) Pearson chi-square value exceeds the tabulated chi-square value.

Accept H_0 if the calculated (observed) Pearson chi-square value is less than or equal to the tabulated chi-square value.

The calculated chi-square value is given as follows:

The calculated chisquare value is given as follows:

$$X_{cal}^2 = \frac{\sum_{i=1}^r \sum_{j=1}^c (O_{ij} - E_{ij})^2}{E_{ij}} \quad (1)$$

where

$$E_{ij} = \frac{n_{i.} \cdot n_{.j}}{n} \quad (2)$$

In (1) and (2),

O_{ij} is the observed frequency in cell i,j

E_{ij} is the expected frequency in cell i,j

$n_{i.}$ is the sum of observed frequencies in row I

$n_{.j}$ is the sum of observed frequencies in column j

n is the sum of all observed cell frequencies

$I = 1, \dots, r$ and $j = 1, \dots, c$

r is the number of rows

c is the number of columns.

X_{cal} = calculated chi-square value

X_{tab} = tabulated chi-square value

Tabulated chi-square values are read from the chi-square table using values of alpha and the degrees of freedom, df .

$$X_{tab}^2 = X_{\alpha}^2(df) \quad \text{where}$$

$df = (r-1)(c-1)$ = the degrees of freedom of the chisquare statistic

(3)

Two-by two contingency tables:

A special case arises when there are only 2 rows and 2 columns. In this case, $df = (r-1)(c-1) = (2-1)(2-1) = 1$. If $\alpha = 0.05$, then the tabulated chi-square value becomes 3.841.

Thus, the null hypothesis is rejected if the observed chi-square value exceeds 3.841. The null hypothesis is accepted if the observed chi-square value is less than or equal to 3.841.

Limitations of two-by two chi-square tests:

In cases when there are several factors in the model, simple two-by-two chi-square tests will not be good enough to analyse the complex interactions that arise among the various levels of the factors. Considering only two factors at a time simplifies the analysis, but also avoids the effect of all other external factors some of which could in fact be influential.

This may lead to conflicting findings whereby an interaction effect between two factors could be both significant and insignificant depending on the presence or absence of a third factor.

This limitation could be avoided by the use of the hierarchical log-linear model. This model gives all effects an equal chance to appear in the model at each stage. The process of testing effects for significance begins with the interaction of the highest order, and so until the main effects themselves are tested for significance. (Walpole 1983)

3.5.4. The hierarchical log-linear model:

Introduction:

A interaction effect between two factors A and B is said to be significant if A and B are strongly associated with each other at a fixed level of significance denoted by α . If the interaction between A and B is significant, then an increase or decrease in A results in an increase or decrease in B. Let the correlation coefficient between A and B be denoted by r ($-1 \leq r \leq +1$ always). If A and B are positively correlated, then $r > 0$. If A and B are negatively correlated, then $r < 0$. If there is no correlation between A and B, then $r = 0$. Suppose that the interaction effect between factors A and B is significant. Suppose also that the levels of A and B are coded similarly. The significance of the interaction effect between A and B indicates that an observation that randomly falls into category I of factor A is also likely to fall into category I of factor B at random.

Example:

A: Income

1. Poor

2. Fair

B: Type of job

1. Part-time

2. Full-time

Suppose that factors A and B are significantly associated. Then, a randomly identified poor person is likely to be a part - time worker.

Testing effects for significance:

A hierarchical log-linear model of order k contains all interactions of order less than or equal to k . Once the interaction of the highest order (k) is included in the model, then all interactions of order $\leq k$ will be included in the same model automatically.

At stage 1 the interaction effect of order k is tested for significance.

At stage 2 all interaction effects of order $k-1$ are tested for significance.

At stage 3 all interaction effects of order $k-2$ are tested for significance.

All interaction effects of order 3 are tested for significance.

All interaction effects of order 2 are tested for significance.

At last, all main effects are tested for significance.

The process stops after the main effects have been tested for significance.

Definition:

In the hierarchical log-linear model, an interaction effect between any number of factors is said to be significant at the $\alpha = 5\%$ level of significance if the associated Z-value lies outside the interval $(-1.96, +1.96)$. If the Z-value lies within $(-1.96, +1.96)$, then the interaction effect becomes insignificant at the $\alpha = 5\%$ level of significance.

As an example, consider a hierarchical log-linear model involving only 3 factors A, B and C. There is 1 interaction of order 3, three interactions of order 2, and three main effects. These are:

$A*B*C$	(Interaction of order 3)
$A*B, A*C, B*C$	(Interaction of order 2)
A, B, C	(Main effects)

At stage 1, $A*B*C$ will be tested for significance.

At stage 2, $A*B, A*C$ and $B*C$ will be tested for significance.

At stage 3, the main effects A, B and C will be tested for significance.

Decision rule:

Suppose that the sample size is fairly large. At the $\alpha = 0.05$ level of significance, an interaction effect becomes significant if the calculated or observed Z value lies either to the left of -1.96 or to the right of $+1.96$. If the value of Z lies between -1.96 and $+1.96$, the effect becomes insignificant at the $\alpha = 0.05$ level.

CHAPTER : 4. RESULTS OF STUDY

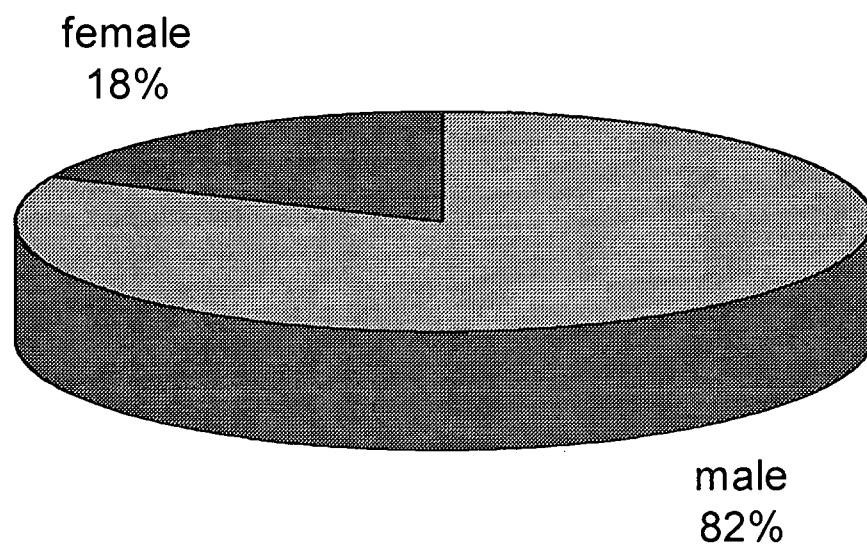
The completed questionnaires that were returned were screened to determine whether the respondents met the selection criteria. Only responses of qualified medical professions registered the SAMDC as a general practitioner or specialist physician was used.

For the purposes of the study the responses were treated as representative of the whole profession, although the possibility of significantly different opinions among non-respondents should be borne in mind.

An overall response rate of 32.2% was achieved.

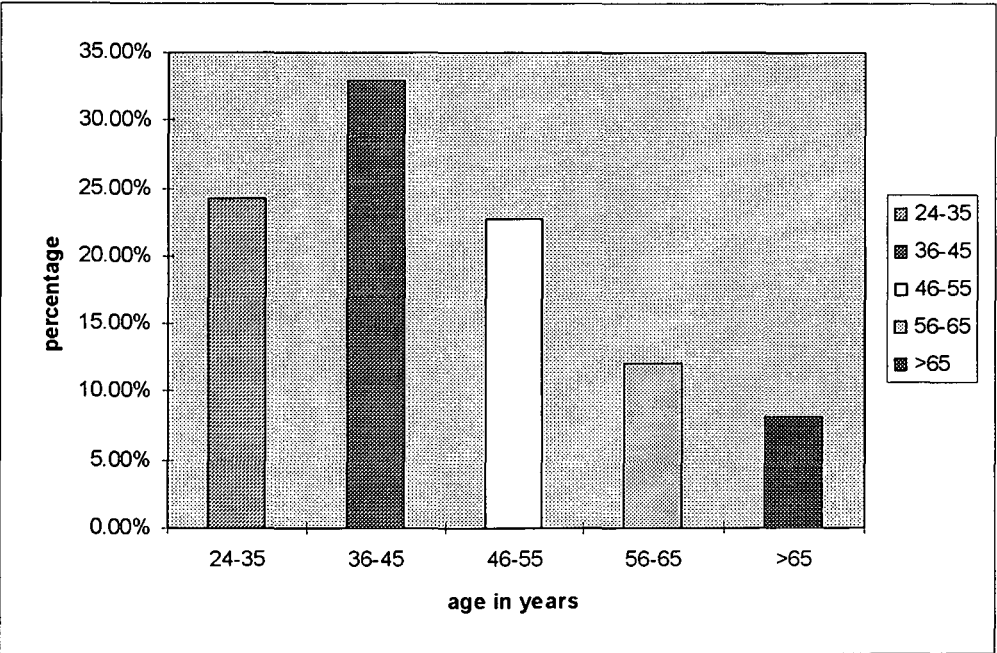
4.1. Demographic data:

Figure 1. Pie chart indicating gender distribution of medical practitioners responding to the questionnaire.



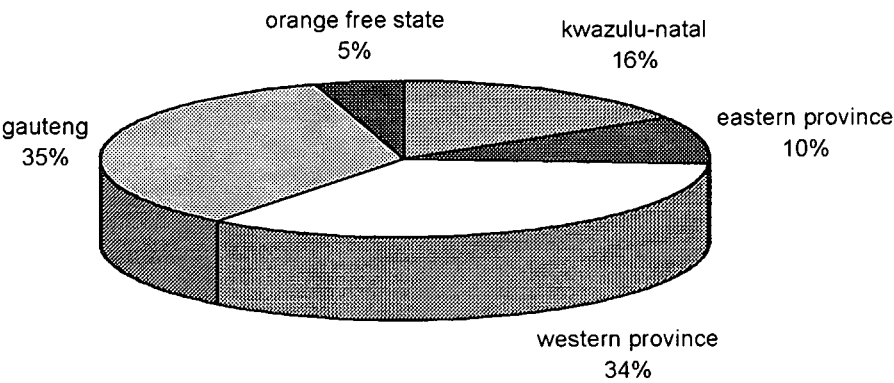
The total male respondents outnumbered the female respondents by 4 to 1 (81.68% to 18.32%)

Figure 2: Age distribution of medical practitioners responding to the questionnaire.



The largest group of respondents fell within the 36-45 age group. The smallest group was the over 65 age group.

Figure 3: Provincial distribution of medical practitioners .



The majority of the respondents were from Gauteng and Western Province.

Table 1: University of qualification:

	Frequency	Percentage
Natal university	36	11.2%
University of Durban-Westville	3	0.9%
University of Witwatersrand	90	28%
University of Orange Free State	19	5.9%
Stellenbosch University	19	5.9%
University of Cape Town	97	30.1%
Pretoria university	18	5.6%
RCSI	3	0.9%
Medunsa	1	0.3%
United Kingdom	6	1.9%
India	11	3.4%
Ireland	6	1.9%
Rome	1	0.3%
Tel Aviv	1	0.3%
Belgium	4	1.2%
Vienna	1	0.3%
Zimbabwe	2	0.6%
Portugal	2	0.6%
Australia	1	0.3%
Kinshasa	1	0.3%
	322	100%

The majority of practitioners obtained their basic medical qualification from the university of Cape Town(30.1%). This is followed closely by the university of the Witwatersrand(28%).

Table 2: Qualifications in complementary medicine.

	Frequency	Percentage
Yes	22	6.8%
No	300	93.2%

The majority of medical practitioners indicated that they do not have any qualification in complementary medicine(93.2%).

Table 3: Type of complementary medicine.

	Frequency	Percentage
acupuncture	9	2.8%
ayurveda	1	0.3%
homeopathy	4	1.2%
hypnosis	1	0.3%
chiropractic	1	0.3%
aromatherapy	1	0.3%

More medical practitioners had qualifications in acupuncture than other complementary therapies.

Table 4: Practice type

	Frequency	Percentage
solo	189	58.7%
partnership	102	31.7%
hospital/clinic	11	3.4%
other	13	4%
solo and hospital/clinic	3	0.9%
partnership and hospital/clinic	3	0.9%

The majority of medical practitioners who responded to the questionnaire have their own practices(58.7%).

4.2. Incorporation of complementary medicine in practice

Table 5: Incorporation of complementary medicine

	YES		NO	
	Frequency	%	Frequency	%
homeopathy	45	14%	265	82.3%
manipulation	42	13%	264	82%
acupuncture	33	10.2%	272	84.5%
ayurveda	6	1.9%	294	91.3%
herbalism	17	5.3%	285	88.5%
reflexology	10	3.1%	287	89.1%
aromatherapy	12	3.7%	283	87.9%

Only 14% of medical practitioners incorporate homeopathy in their practice and only 13% incorporate chiropractic in their practice. Besides acupuncture(10.2%), the other complementary therapies are incorporated in their practice by a very small percentage of the respondents.

Table 6: How often do use it/them?

	Frequency	Percentage
on all patients	3	0.9%
on most patients	3	0.9%
on some patients	86	26.7%

Of those that said that they incorporate complementary therapies in their practice only 0.9% use it on all patients. The majority in this question indicated that they use it on some patients only.

Table 7: Do you wish to continue using them?

	Frequency	Percentage
Yes	90	28%
No	25	7.8%

Of those that indicated that they incorporate complementary medicine in their practice only 28% indicated that they wished to continue using them. Only 35.8% of practitioners responded to this question.

Table 8: How complementary medicine has influenced practice/outlook.

	Frequency	Percentage
relearned history taking	21	6.5%
listen more/less dismissive	45	14%
now find patients expectations for Non-steroidal anti-inflammatories, antibiotics, psychotropics difficult	25	7.8%
now want to refer patients	19	5.9%
new outlook on chronic disease	55	17.1%
now see patient as a whole and not as much at cellular/biochemical level	38	11.8%
more aware of patient dissatisfaction with conventional medicine	58	18%
rekindled interest in clinical medicine	19	5.9%
find practice richer and more interesting	30	9.3%
did not affect my practice/outlook	107	33.2%
I can do without it	46	14.3%

More than one response was allowed in this question. The majority of respondents(33.2% indicated that the incorporation of complementary medicine into their practice did not affect their practice or outlook.

Table 9: Reason/s you do not incorporate complementary medicine in your practice

	Frequency	Percentage
lack confidence in complementary therapy	107	33.2%
lack self confidence in the application	34	10.6%
never heard of them	14	4.3%
lack knowledge in CM	165	51.2%
lack of time	39	12.1%
lack of opportunity	27	8.4%
partner's attitude	1	0.3%
lack of opportunity due to patients resistance	11	3.4%
feel it is of no value	57	17.7%
could be dangerous to the patient	55	17.1%

The majority of practitioners(51.2%) indicated that they do not incorporate complementary medicine into their practice because they lack knowledge in it.

Table 10: Inclusion of complementary medicine in future practice

	Frequency	Number
Yes	82	25.5%
No	101	31.4%
Maybe	125	38.8%

The response suggests that many medical practitioners will incorporate or may incorporate complementary medicine in their future practice.

Table 11: Factors that might encourage the use of CM in the future?

	Frequency	Percentage
more knowledge	191	59.3%
client demand	95	29.5%
proof of efficacy	238	73.9%
nothing would encourage	20	6.2%
clarity on legal aspects	45	14%

The majority of respondents indicated that more knowledge might encourage the use of complementary medicine in the future.

4.3. Knowledge of complementary medicine.

(please ring appropriate number)

1 - not effective

5 - very effective

Table 12.1: How would you rate Homeopathy as a useful form of healing

	1	2	3	4	5
Frequency	60	76	98	32	9
Percentage	18.6%	23.6%	30.4%	9.9%	2.8%

Table 12.2: How would you rate Chiropractic as a useful form of healing

	1	2	3	4	5
Frequency	39	58	123	45	15
Percentage	12.1%	18%	38%	14%	4.7%

Table 12.3. How would you rate Ayurveda as a useful form of healing

	1	2	3	4	5
Frequency	100	37	35	9	7
Percentage	31.1%	11.5%	10.9%	2.8%	2.2%

Table12.4. How would you rate Herbalism as a useful form of healing

	1	2	3	4	5
Frequency	101	71	57	8	5
Percentage	31.4%	22%	17.7%	2.5%	1.6%

Table12.5 How would you rate Reflexology as a useful form of healing

	1	2	3	4	5
Frequency	108	80	47	14	1
Percentage	33.5%	24.8%	14.6%	4.3%	0.3%

Table12.6 How would you rate Aromatherapy as a useful form of healing

	1	2	3	4	5
Frequency	121	73	37	11	4
Percentage	37.6%	22.7%	11.5%	3.4%	1.2%

Table12.7 How would you rate Osteopathy as a useful form of healing

	1	2	3	4	5
Frequency	82	74	55	12	5
Percentage	25.5%	23%	17.1%	3.7%	1.6%

The majority of respondents indicated modes 1 to 3 for the various complementary medicines. Only a small percentage of the respondents indicated mode 5 for all the complementary therapies indicating that they do not regard the complementary therapies as a very effective form of healing.

Question: How would you rate your knowledge on:

1 - know nothing about it/them

5 - know everything there is to know about it.

Table13.1. How would you rate your knowledge on Homeopathy

	1	2	3	4	5
Frequency	70	129	94	16	2
Percentage	21.7%	40.1%	29.2%	5.0%	0.6%

Table13.2. How would you rate your knowledge on Chiropractic

	1	2	3	4	5
Frequency	63	110	103	31	5
Percentage	19.6%	34.2%	32%	9.6%	1.6%

Table13.3. How would you rate your knowledge on Acupuncture

	1	2	3	4	5
Frequency	70	101	99	36	6
Percentage	21.7%	31.4%	30.7%	11.2%	1.9%

Table13.4. How would you rate your knowledge on Ayurveda

	1	2	3	4	5
Frequency	231	46	22	9	0
Percentage	71.7%	14.3%	6.8%	2.8%	0%

Table 13.5. How would you rate your knowledge on Herbalism

	1	2	3	4	5
Frequency	153	101	47	9	1
Percentage	47.5%	31.4%	14.6%	2.8%	0.3%

Table 13.6. How would you rate your knowledge on Reflexology

	1	2	3	4	5
Frequency	133	101	60	13	2
Percentage	41.3%	31.4%	18.6%	4%	0.6%

Table 13.7. How would you rate your knowledge on Aromatherapy

	1	2	3	4	5
Frequency	149	99	39	13	3
Percentage	46.3%	30.7%	12.1%	4%	0.9%

Table 13.8. How would you rate your knowledge on Osteopathy

	1	2	3	4	5
Frequency	179	84	32	6	2
Percentage	55.6%	26.1%	9.9%	1.9%	0.6%

The majority of respondents indicated modes 1 to 3 indicating very little knowledge in the various complementary therapies. Only a small percentage indicated mode 5 for most of the complementary therapies and 0% indicated mode 5 for ayurveda.

Table 14 : Referrals to complementary therapists

	Yes	No
homeopath	85 (26.4%)	224 (69.6%)
chiropractor	161 (50%)	155 (48.1%)
ayurvedic doctor	16 (5%)	289 (89.8%)
herbalist	17 (5.3%)	285 (88.5%)
reflexologist	46 (14.3%)	257 (79.8%)
aromatherapist	50 (15.5%)	254 (78.9%)
osteopath	19 (5.90%)	282 (87.58%)

The majority of referrals by medical practitioners were to the chiropractic profession(50%).This is followed by homeopathy by 26.4%.

Table 15: Frequency of referrals:

	Frequency	Percentage
last 6 months	86	26.7%
last 2 years	80	24.8%
other	17	5.3%

26.7% of referrals have been within the last six months.

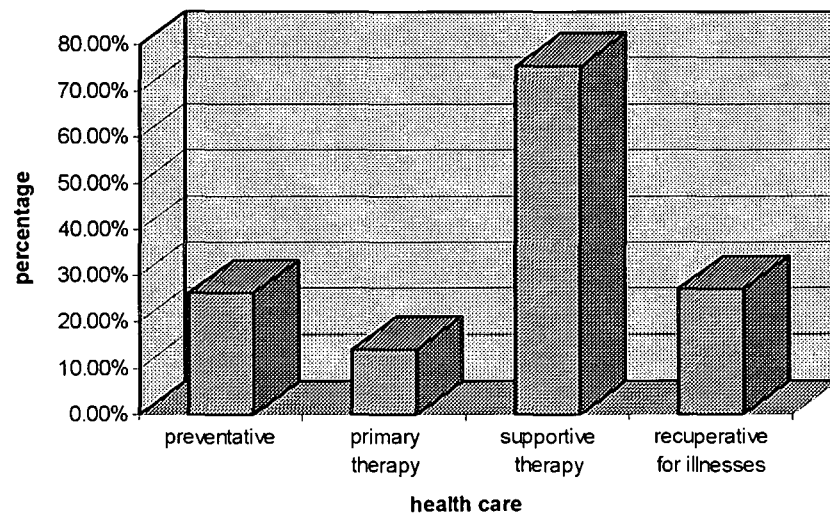
Table 16: Perceived efficacy of complementary medicine.

1=Homoeopathy 2=Chiropractic 3=Ayurveda 4=Herbalism 5= reflexology 6=Aromatherapy

	1	2	3	4	5	6
Acne	77(24%)	1(0.3%)	11(3.4%)	32(10%)	0(0%)	15((4.6%)
Alcoholism	40(12.4%)	2(0.6%)	16(5%)	13(4%)	16(5%)	7(2.2%)
Allergies	138(42.9%)	2(0.6%)	13(4%)	26(8.1%)	6(1.9%)	9(2.8%)
Appendicitis	15(4.7%)	0(0%)	4(1.2%)	3(0.9%)	1(0.3%)	0(0%)
Arthritis(Rheumatoid)	75(23.3%)	43(13.4%)	14(4.3%)	20(6.2%)	33(10.2%)	18(5.6%)
Asthma	115(35.7%)	8(2.5%)	13(4%)	20(6.2%)	8(2.5%)	12(3.8%)
Backpain	29(9%)	181(56.2%)	4(1.2%)	5(1.6%)	40(12.4%)	13(4%)
Bronchitis	58(18%)	1(0.3%)	9(2.8%)	14(4.3%)	5(1.6%)	16(5%)
Cancer	30(9.3%)	0(0%)	11(3.4%)	15(1.6%)	6(1.9%)	7(2.2%)
Common cold	102(31.7%)	1(0.3%)	13(4%)	28(8.7%)	6(1.9%)	22(6.8%)
Depression	66(20.5%)	2(0.6%)	21(6.5%)	12(3.8%)	39(12.1%)	36(11.2%)
Diabetes mellitus	30(9.3%)	2(0.6%)	11(3.4%)	14(4.3%)	3(0.9%)	1(0.3%)
Fatigue	87(27%)	8(2.5%)	19(5.9%)	25(7.8%)	54(16.8%)	53(16.5%)
Hay fever	118(36.6%)	1(0.3%)	19(5.9%)	25(7.8%)	8(2.5%)	15(4.6%)
Hypertension	51(15.8%)	1(0.3%)	15(4.6%)	19(5.9%)	17(5.3%)	15(4.6%)
Insomnia	69(21.4%)	2(0.6%)	16(5%)	27(8.4%)	51(15.8%)	47(14.6%)
Myocardial infarction	17(5.3%)	0(0%)	13(4%)	5(1.6%)	3(0.9%)	2(0.6%)
Menstrual problems	70(21.7%)	4(1.2%)	14(4.3%)	28(8.7%)	23(7.1%)	16(5%)
Migraine	80(24.8%)	15(4.6%)	17(5.3%)	23(7.1%)	43(13.4%)	31(9.6%)
Obesity	52(16.1%)	2(0.6%)	14(4.3%)	32(10%)	16(5%)	8(2.5%)
Pneumonia	21(6.5%)	1(0.3%)	9(2.8%)	5(1.6%)	1(0.3%)	4(1.2%)
Stopping smoking	58(18%)	4(1.2%)	14(4.3%)	21(6.5%)	31(9.6%)	26(8.1%)
Stress	73(22.7%)	9(2.8%)	23(7.1%)	27(8.4%)	79(24.5%)	77(24%)

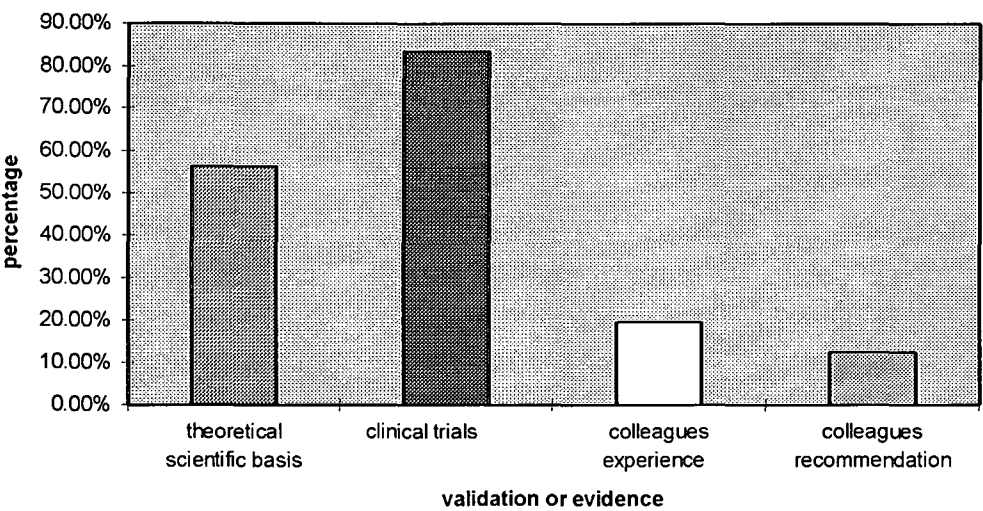
Chiropractic is perceived as being effective in the treatment in the treatment of backpain(56.2%) and homeopathy is as being effective in the treatment of allergies, asthma, common cold and hay fever.

Figure 4: How do you see complementary medicine?



The majority of practitioners see complementary medicine as supportive therapy(75.5%).More than one response was allowed in this question.

Figure 5: Validation or evidence considered important before accepting CM as useful for patient



The majority of respondents(83.5%) consider clinical trials as important validation or evidence before accepting CM as useful for patient.

Table 17: Where did you hear about complementary medicine for the first time?

	Frequency	Percentage
this questionnaire	18	5.6%
friends	42	13%
literature	160	49.7%
patients	102	31.7%
doctors and supplementary medical people	103	32%
other	78	24.2%

The majority of respondents(49.7%) heard about CM in literature for the first time.

Table 18: Sources of information used to find out about complementary medicine.

	never		sometimes		often	
	No.	%	No.	%	No.	%
colleagues	104	32.3%	131	40.7%	29	9%
seminars	158	49.1%	78	24.2%	17	5.3%
television/ra dio	101	31.4%	134	41.6%	15	4.7%
scientific books	89	27.6%	128	39.8%	42	13%
journals	82	25.5%	142	44.1%	56	17.4%
layman's books	132	41%	100	31.1%	22	6.8%

Most sources are sometimes used to obtain information on complementary medicine.

4.4. Health care

Table 19: Health care

1- strongly agree

2- agree

3- neutral

4- disagree

5- strongly disagree

	1	2	3	4	5
basic health care is a right	193	77	16	15	12
	59.9%	23.9%	5%	4.7%	3.7%
basic health care is a privilege	35	51	26	61	106
	10.9%	15.8%	8.1%	18.9%	32.9%
comprehensive health care is a right	84	88	57	45	31
	26.1%	27.3%	17.7%	14%	9.6%
complementary medicine should play an active role in the health care system in South Africa	40	91	111	39	27
	12.4%	28.3%	34.5%	12.1%	8.4%
there is a lack of co-operation in primary health care	91	135	41	28	10
	28.3%	41.9%	12.7%	8.7%	3.1%
complementary medicine should be included into the syllabus for undergraduates in the medical profession	49	107	77	39	33
	15.2%	33.2%	23.9%	12.1%	10.2%

The majority of medical practitioners(59.9%) indicated that basic health care is a right.

4.5. Pearson chi-square test results.

Decision rule for the Pearson chi-square test

First method: (using the calculated chi-square values)

At the $\alpha = 0.05$ level of significance,

1. Reject the null hypothesis if the calculated chi-square value is greater than the tabulated chi-square value.
2. Accept the null hypothesis if the calculated chi-square value is less than or equal to the tabulated chi-square value.

Second method: (using P- values)

At the $\alpha = 0.05$ level of significance,

1. Reject the null hypothesis if the P- value is less than 0.05
2. Accept the null hypothesis if the P-value is greater than or equal to 0.05

Results from Pearson chi-square tests revealed that the following associations were significant at the $\alpha = 5\%$ level of significance. Table 20 gives a summary.

Table 20 : Summary of results from chi-square tests.

Sig = Significance

Interaction effect	Observed chi-square value	Tabulated chi-square value	P-value	Sig.
knowledge of homeopathy by educational qualification	25.21	21.03	0.04719	yes
knowledge of homeopathy by university of basic qualification	102.64	43.77	0.27812	yes
knowledge of homeopathy by qualification in complementary therapy	25.68	15.51	0.00420	yes
knowledge of homeopathy by practice type	80.45	36.42	0.000000	yes
knowledge of homeopathy by incorporation of homeopathy in practice	20.47	15.51	0.02509	yes
knowledge of homeopathy by incorporation of herbalism in practice	17.44	15.51	0.06510	yes
knowledge of homeopathy by using it on all patients	25.37	15.51	0.00469	yes
knowledge of homeopathy by relearning of history taking	18.71	15.51	0.04404	yes
knowledge of homeopathy by finding practice richer and more interesting	33.08	15.51	0.00026	yes
knowledge of homeopathy by lack of knowledge in CM as a reason for not incorporating it in practice	26.85	15.51	0.00275	yes
knowledge of homeopathy by more knowledge as a factor that might encourage the use of CM in future	30.29	15.51	0.00077	yes
knowledge of homeopathy by client demand as a factor that might encourage the use of CM in future	18.52	15.51	0.04685	yes

knowledge of homeopathy by rating of homeopathy as a useful form of healing	113.4	36.42	0.00000	yes
knowledge of homeopathy by rating of chiropractic as a useful form of healing	87.71	31.41	0.00000	yes
knowledge of homeopathy by rating of herbalism as a useful form of healing	58.83	31.41	0.00015	yes
knowledge of homeopathy by rating of reflexology as a useful form of healing	60.60	31.41	0.00009	yes
knowledge of homeopathy by rating of aromatherapy as a useful form of healing	55.70	31.41	0.00040	yes
knowledge of homeopathy by rating of osteopathy as a useful form of healing	64.93	31.41	0.00002	yes
knowledge of homeopathy by rating of knowledge of chiropractic	571.26	31.41	0.00000	yes
knowledge of homeopathy by rating of knowledge of chiropractic	412.97	36.42	0.00000	yes
knowledge of homeopathy by rating of knowledge of ayurveda	197.94	26.30	0.00000	yes
knowledge of homeopathy by rating of knowledge of herbalism	484.61	31.41	0.00000	yes
knowledge of homeopathy by rating of knowledge of reflexology	662.60	31.41	0.00000	yes
knowledge of homeopathy by rating of knowledge of aromatherapy	317.21	31.41	0.00000	yes
knowledge of homeopathy by rating of knowledge of osteopathy	183.13	31.41	0.00000	yes
knowledge of homeopathy by referral to a homeopath	30.92	15.51	0.00060	yes
knowledge of homeopathy by referral to a chiropractor	20.41	15.51	0.02561	yes
knowledge of homeopathy by frequency of referrals	46.44	26.30	0.00070	yes
knowledge of homeopathy by perceived efficacy in the treatment of allergies	65.21	43.78	0.46919	yes
knowledge of homeopathy by perceived efficacy in the treatment of arthritis(rheumatoid)	87.65	43.78	0.94260	yes
knowledge of homeopathy by perceived efficacy in the treatment of asthma	78.59	43.78	0.67461	yes
knowledge of homeopathy by perceived efficacy in the treatment of backpain	122.91	43.78	0.01212	yes
knowledge of homeopathy by perceived efficacy in the treatment of bronchitis	49.67	43.78	0.96870	yes
knowledge of homeopathy by perceived efficacy in the treatment of cancer	84.70	43.78	0.05089	yes
knowledge of homeopathy by perceived efficacy in the treatment of common cold	49.60	43.77	0.98964	yes
knowledge of homeopathy by perceived efficacy in the treatment of depression	62.58	43.78	0.99585	yes
knowledge of homeopathy by perceived efficacy in the treatment of fatigue	84.27	43.78	0.96756	yes
knowledge of homeopathy by perceived	60.23	43.78	0.79106	yes

efficacy in the treatment of hay fever				
knowledge of homeopathy by perceived efficacy in the treatment of hypertension	74.10	43.78	0.79466	yes
knowledge of homeopathy by perceived efficacy in the treatment of insomnia	68.07	43.78	0.98327	yes
knowledge of homeopathy by perceived efficacy in the treatment of menstrual problems	72.94	43.78	0.90514	yes
knowledge of homeopathy by perceived efficacy in the treatment of migraine	117.68	43.78	0.18736	yes
knowledge of homeopathy by perceived efficacy in the treatment to stop smoking	68.92	43.78	0.97984	yes
knowledge of homeopathy by perceived efficacy in the treatment of stress	89.18	43.78	0.86540	yes
knowledge of homeopathy by seeing CM as preventative medicine	17.46	9.49	0.00370	yes
knowledge of homeopathy by clinical trials as a form validation or evidence	26.05	21.02	0.03748	yes
knowledge of homeopathy by hearing about CM for the first time from patients	31.98	21.02	0.00647	yes
knowledge of homeopathy by hearing about CM for the first time from doctors and supplementary medical people	39.63	15.51	0.00002	yes
knowledge of homeopathy by hearing about CM for the first time from other sources	40.68	21.03	0.00036	yes
knowledge of homeopathy by using colleagues to find out more about CM	40.15	21.03	0.00043	yes
knowledge of homeopathy by using seminars as a source of information to find out more about CM	26.50	21.03	0.03310	yes
knowledge of homeopathy by using television/radio to find out more about CM	32.48	21.03	0.00553	yes
knowledge of homeopathy by using scientific books to find out more about CM	46.92	21.03	0.00004	yes
knowledge of homeopathy by using journals to find out more about CM	31.29	21.03	0.00804	yes
knowledge of homeopathy by using layman's books to find out more about CM	37.01	21.03	0.00126	yes
knowledge of homeopathy by basic health care is a right	43.69	31.41	0.01174	yes
knowledge of homeopathy by basic health care is a privilege	36.70	31.41	0.06169	yes
knowledge of homeopathy by comprehensive health care is a right	41.85	36.42	0.07369	yes
knowledge of homeopathy by CM should play an active role in the health care system in SA	84.68	31.41	0.00000	yes
knowledge of homeopathy by there is a	54.99	31.41	0.00049	yes

lack of co-operation in primary health care				
knowledge of homeopathy by CM should be included into the syllabus for undergraduates in the medical profession	68.62	31.41	0.00001	yes
knowledge of chiropractic by university of basic medical qualification	73.05	43.77	0.95405	yes
knowledge of chiropractic by type of CM	51.09	41.34	0.03868	yes
knowledge of chiropractic by practice type	50.84	36.42	0.01012	yes
knowledge of chiropractic by using it on most patients	12.01	9.49	0.03460	yes
knowledge of chiropractic by now see patient as a whole and not as much at cellular/ biochemical level	12.00	9.49	0.03479	yes
knowledge of chiropractic by lack knowledge in CM as a reason for not using it	16.41	15.51	0.08844	yes
knowledge of chiropractic by could be dangerous to the patient as a reason for not using it	30.67	26.30	0.49335	yes
knowledge of chiropractic by more knowledge as a factor that might encourage the use of CM in future	21.33	15.51	0.01894	yes
knowledge of chiropractic by rating of homeopathy as a useful form of healing	69.38	36.42	0.00006	yes
knowledge of chiropractic by rating of chiropractic as a useful form of healing	123.57	31.41	0.00000	yes
knowledge of chiropractic by rating of ayurveda as a useful form of healing	39.97	36.42	0.10547	yes
knowledge of chiropractic by rating of herbalism as a useful form of healing	49.87	31.41	0.00221	yes
knowledge of chiropractic by rating of reflexology as a useful form of healing	48.29	31.41	0.00344	yes
knowledge of chiropractic by rating of aromatherapy as a useful form of healing	46.64	31.41	0.00541	yes
knowledge of chiropractic by rating of osteopathy as a useful form of healing	50.52	31.41	0.00184	yes
knowledge of chiropractic by rating of knowledge of homeopathy	571.26	31.41	0.00000	yes
knowledge of chiropractic by rating of knowledge of acupuncture	363.86	36.42	0.00000	yes
knowledge of chiropractic by rating of knowledge of ayurveda	169.81	26.30	0.00000	yes
knowledge of chiropractic by rating of knowledge of herbalism	285.92	31.41	0.00000	yes
knowledge of chiropractic by rating of knowledge of reflexology	499.30	31.41	0.00000	yes
knowledge of chiropractic by rating of knowledge of aromatherapy	244.77	31.41	0.00000	yes

knowledge of chiropractic by rating of knowledge of osteopathy	229.24	31.41	0.00000	yes
knowledge of chiropractic by referral to a homeopath	18.71	15.51	0.04404	yes
knowledge of chiropractic by referral to a chiropractor	40.60	15.51	0.00001	yes
knowledge of chiropractic by referral to a herbalist	21.72	21.07	0.11523	yes
knowledge of chiropractic by referral to a reflexologist	20.75	21.03	0.14516	yes
knowledge of chiropractic by referral to an osteopath	26.38	15.51	0.00326	yes
knowledge of chiropractic by frequency of referrals	39.25	26.30	0.00621	yes
knowledge of chiropractic by perceived efficacy in the treatment of acne	59.00	43.77	0.17951	yes
knowledge of chiropractic by perceived efficacy in the treatment of alcoholism	56.07	43.77	0.77722	yes
knowledge of chiropractic by perceived efficacy in the treatment of allergies	75.04	43.77	0.18485	yes
knowledge of chiropractic by perceived efficacy in the treatment of arthritis(rheumatoid)	111.32	43.77	0.44695	yes
knowledge of chiropractic by perceived efficacy in the treatment of asthma	84.72	43.77	0.48820	yes
knowledge of chiropractic by perceived efficacy in the treatment of backpain	126.75	43.77	0.00649	yes
knowledge of chiropractic by perceived efficacy in the treatment of bronchitis	77.50	43.77	0.25198	yes
knowledge of chiropractic by perceived efficacy in the treatment of cancer	73.50	43.77	0.21965	yes
knowledge of chiropractic by perceived efficacy in the treatment of common cold	63.06	43.77	0.83577	yes
knowledge of chiropractic by perceived efficacy in the treatment of depression	106.48	43.77	0.19784	yes
knowledge of chiropractic by perceived efficacy in the treatment of diabetes mellitus	59.26	43.77	0.07534	yes
knowledge of chiropractic by perceived efficacy in the treatment of fatigue	104.02	43.77	0.64273	yes
knowledge of chiropractic by perceived efficacy in the treatment of hay fever	87.08	43.77	0.08141	yes
knowledge of chiropractic by perceived efficacy in the treatment of hypertension	78.88	43.77	0.66626	yes
knowledge of chiropractic by perceived efficacy in the treatment of insomnia	77.40	43.77	0.90602	yes
knowledge of chiropractic by perceived efficacy in the treatment of myocardial infarction	58.86	43.77	0.02754	yes
knowledge of chiropractic by perceived efficacy in the treatment of menstrual problems	98.22	43.77	0.25969	yes

knowledge of chiropractic by perceived efficacy in the treatment of migraine	84.44	43.77	0.93018	yes
knowledge of chiropractic by perceived efficacy in the treatment of obesity	54.35	43.77	0.82424	yes
knowledge of chiropractic by perceived efficacy in the treatment of pneumonia	60.56	43.77	0.01949	yes
knowledge of chiropractic by perceived efficacy in the treatment to stop smoking	108.29	43.77	0.16594	yes
knowledge of chiropractic by perceived efficacy in the treatment of stress	77.55	43.77	0.97949	yes
knowledge of chiropractic by theoretical scientific basis as validation or evidence considered important before accepting CM as useful for patient	10.49	9.49	0.06245	yes
knowledge of chiropractic by clinical trials as validation or evidence considered important before accepting CM as useful for patient	26.92	15.51	0.02941	yes
knowledge of chiropractic by hearing about CM for the first time from patients	36.58	21.03	0.00145	yes
knowledge of chiropractic by hearing about CM for the first time from doctors and supplementary medical people	38.26	15.51	0.00003	yes
knowledge of chiropractic by hearing about CM for the first time from other sources	37.62	21.03	0.00103	yes
knowledge of chiropractic by using colleagues to find out about CM	25.00	21.03	0.04989	yes
knowledge of chiropractic by using seminars to find out about CM	27.92	21.03	0.02210	yes
knowledge of chiropractic by using television/radio to find out about CM	33.37	21.03	0.00416	yes
knowledge of chiropractic by using scientific books to find out more about CM	29.06	21.03	0.01578	yes
knowledge of chiropractic by using journals to find out more about CM	30.90	21.03	0.00905	yes
knowledge of chiropractic by layman's books to find out more about CM	21.04	21.03	0.13559	yes
knowledge of chiropractic by basic health care is a privilege	41.92	31.41	0.01834	yes
knowledge of chiropractic by CM should play an active role in the health care system in SA	50.52	31.41	0.00184	yes
knowledge of chiropractic by there is a lack of co-operation in primary health care	43.09	31.41	0.01370	yes
knowledge of chiropractic by CM should be included into the syllabus for undergraduates in the medical profession	53.09	31.41	0.00087	yes
knowledge of acupuncture by university	68.96	43.77	0.99973	yes

of basic medical qualification				
knowledge of acupuncture by qualifications in CM	39.42	21.03	0.00009	yes
knowledge of acupuncture by type of CM	77.99	43.77	0.00062	yes
knowledge of acupuncture by incorporation of homeopathy in practice	26.48	21.03	0.00918	yes
knowledge of acupuncture by incorporation of acupuncture in practice	59.17	21.03	0.00000	yes
knowledge of acupuncture by incorporation of ayurveda in practice	22.95	21.03	0.02817	yes
knowledge of acupuncture by incorporation of herbalism in practice	22.74	21.03	0.03001	yes
knowledge of acupuncture by using them on most patients	21.05	12.59	0.00180	yes
knowledge of acupuncture by wishing to continue using them	22.23	21.03	0.03500	yes
knowledge of acupuncture by now see patient as a whole and not as much at cellular/biochemical level	14.97	12.59	0.02050	yes
knowledge of acupuncture by never heard of them as a reason for not incorporating CM	71.47	21.03	0.00000	yes
knowledge of acupuncture by lack knowledge in CM as a reason for not incorporating them	124.31	21.03	0.00000	yes
knowledge of acupuncture by rating of chiropractic as a useful form of healing	77.80	43.77	0.00000	yes
knowledge of acupuncture by rating of ayurveda as a useful form of healing	67.41	43.77	0.00116	yes
knowledge of acupuncture by rating of herbalism as a useful form of healing	59.75	43.77	0.00099	yes
knowledge of acupuncture by rating of aromatherapy as a useful form of healing	54.69	43.77	0.00385	yes
knowledge of acupuncture by rating of aromatherapy as a useful form of healing	54.25	43.77	0.00431	yes
knowledge of acupuncture by rating of osteopathy as a useful form of healing	50.13	43.77	0.01203	yes
knowledge of acupuncture by rating of knowledge of homeopathy	412.97	43.77	0.00000	yes
knowledge of acupuncture by rating of knowledge of chiropractic	363.86	43.77	0.00000	yes
knowledge of acupuncture by rating of knowledge of ayurveda	158.30	36.42	0.00000	yes
knowledge of acupuncture by rating of knowledge of herbalism	315.72	43.77	0.00000	yes
knowledge of acupuncture by rating of knowledge of reflexology	357.58	43.77	0.00000	yes
knowledge of acupuncture by rating of knowledge of aromatherapy	220.22	43.77	0.00000	yes
knowledge of acupuncture by rating of knowledge of osteopathy	169.09	43.77	0.00000	yes
knowledge of acupuncture by referral to a	10.77	21.03	0.00082	yes

chiropractor				
knowledge of acupuncture by perceived efficacy in the treatment of acne	112.24	43.77	0.00005	yes
knowledge of acupuncture by perceived efficacy in the treatment of alcoholism	367.43	43.77	0.00000	yes
knowledge of acupuncture by perceived efficacy in the treatment of allergies	103.27	43.77	0.02931	yes
knowledge of acupuncture by perceived efficacy in the treatment of arthritis(rheumatoid)	286.16	43.77	0.00000	yes
knowledge of acupuncture by perceived efficacy in the treatment of asthma	423.95	43.77	0.00000	yes
knowledge of acupuncture by perceived efficacy in the treatment of backpain	138.45	43.77	0.02568	yes
knowledge of acupuncture by perceived efficacy in the treatment of bronchitis	82.02	43.77	0.54084	yes
knowledge of acupuncture by perceived efficacy in the treatment of cancer	62.16	43.77	0.90509	yes
knowledge of acupuncture by perceived efficacy in the treatment of common cold	61.15	43.77	0.99145	yes
knowledge of acupuncture by perceived efficacy in the treatment of depression	132.19	43.77	0.11706	yes
knowledge of acupuncture by perceived efficacy in the treatment of diabetes mellitus	215.00	43.77	0.00000	yes
knowledge of acupuncture by perceived efficacy in the treatment of fatigue	135.62	43.77	0.39679	yes
knowledge of acupuncture by perceived efficacy in the treatment of hay fever	89.33	43.77	0.32480	yes
knowledge of acupuncture by perceived efficacy in the treatment of hypertension	115.08	43.77	0.17738	yes
knowledge of acupuncture by perceived efficacy in the treatment of insomnia	109.77	43.77	0.59451	yes
knowledge of acupuncture by perceived efficacy in the treatment of myocardial infarction	64.89	43.77	0.05248	yes
knowledge of acupuncture by perceived efficacy in the treatment of menstrual problems	107.42	43.77	0.49778	yes
knowledge of acupuncture by perceived efficacy in the treatment of migraine	143.92	43.77	0.13119	yes
knowledge of acupuncture by perceived efficacy in the treatment of obesity	72.22	43.77	0.66297	yes
knowledge of acupuncture by perceived efficacy in the treatment of pneumonia	63.19	43.77	0.06965	yes
knowledge of acupuncture by perceived efficacy in the treatment to stop smoking	158.46	43.77	0.00375	yes
knowledge of acupuncture by perceived efficacy in the treatment of stress	120.66	43.77	0.61757	yes
knowledge of acupuncture by seeing CM as preventative	19.85	12.59	0.00295	yes
knowledge of acupuncture by seeing CM	71.40	28.87	0.00000	yes

as primary therapy				
knowledge of acupuncture by seeing CM as supportive therapy	63.03	28.87	0.00000	yes
knowledge of acupuncture by seeing CM as recuperative for illnesses	61.66	21.03	0.00000	yes
knowledge of acupuncture by hearing about CM for the first time from patients	41.78	28.87	0.00119	yes
knowledge of acupuncture by hearing about CM for the first time from other sources	42.45	28.87	0.00096	yes
knowledge of acupuncture by using colleagues to find out more about CM	57.11	28.87	0.00001	yes
knowledge of acupuncture by using seminars to find out more about CM	32.47	28.87	0.01936	yes
knowledge of acupuncture by using television/radio to find out more about more about CM	30.71	28.87	0.03106	yes
knowledge of acupuncture by using scientific books to find out more about CM	53.67	28.87	0.00002	yes
knowledge of acupuncture by using journals to find out more about CM	45.85	28.87	0.00031	yes
knowledge of acupuncture by layman's books to find out more about CM	31.56	28.87	0.02476	yes
knowledge of acupuncture by basic health care is a right	47.49	43.77	0.02229	yes
knowledge of acupuncture by basic health care is a privilege	46.63	43.77	0.02703	yes
knowledge of acupuncture by comprehensive health care is a right	49.64	43.77	0.06467	yes
knowledge of acupuncture by CM should play an active role in the health care system in SA	63.02	43.77	0.00039	yes
knowledge of acupuncture by CM should be included into the syllabus for undergraduates in the medical profession	56.25	43.77	0.00256	yes
knowledge of ayurveda by age of practitioner	35.85	26.30	0.00304	yes
knowledge of ayurveda by province of practice	36.19	26.30	0.00272	yes
knowledge of ayurveda by university of basic medical qualification	93.24	43.77	0.08726	yes
knowledge of ayurveda by qualification in CM	15.91	15.51	0.04370	yes
knowledge of ayurveda by type of CM	57.54	41.34	0.00083	yes
knowledge of ayurveda by incorporation of homeopathy	19.77	15.51	0.01123	yes
knowledge of ayurveda by incorporation of manipulation	22.58	15.51	0.00394	yes
knowledge of ayurveda by incorporation of acupuncture	19.53	15.51	0.01226	yes

knowledge of ayurveda by incorporation of ayurveda	31.30	15.51	0.00012	yes
knowledge of ayurveda by incorporation of herbalism	21.76	15.51	0.00538	yes
knowledge of ayurveda by incorporation of reflexology	19.60	15.51	0.01198	yes
knowledge of ayurveda by incorporation of aromatherapy	19.83	15.51	0.01101	yes
knowledge of ayurveda by using them on most patients	18.43	9.49	0.00102	yes
knowledge of ayurveda by wishing to continue using them	16.54	15.51	0.03533	yes
knowledge of ayurveda by relearned history taking	50.33	15.51	0.00000	yes
knowledge of ayurveda by listen more/ less dismissive	31.08	15.51	0.00014	yes
knowledge of ayurveda by now wanting to refer patients	36.96	21.03	0.00023	yes
knowledge of ayurveda by now sees patient as a whole and not as much at cellular/ biochemical level	24.76	9.49	0.00006	yes
knowledge of ayurveda by more aware of patient dissatisfaction with conventional medicine	22.26	15.51	0.00446	yes
knowledge of ayurveda by rekindled interest in clinical medicine	22.91	15.51	0.00348	yes
knowledge of ayurveda by find practice richer and more rewarding	16.34	15.51	0.03776	yes
knowledge of ayurveda by did not affect practice/ outlook	9.79	9.49	0.04416	yes
knowledge of ayurveda by can do without it	17.46	15.51	0.02569	yes
knowledge of ayurveda by lacking confidence in CM as a reason for not incorporating it	12.99	9.49	0.01134	yes
knowledge of ayurveda by lack of opportunity due to patient's resistance as reason for not incorporating it	11.20	9.49	0.02437	yes
knowledge of ayurveda by including CM in future practice	11.22	9.49	0.02419	yes
knowledge of ayurveda by rating of homeopathy as a useful form of healing	37.21	36.42	0.04169	yes
knowledge of ayurveda by rating of chiropractic as a useful form of healing	42.60	31.41	0.00231	yes
knowledge of ayurveda by rating of ayurveda as a useful form of healing	151.74	36.42	0.00000	yes
knowledge of ayurveda by rating of herbalism as a useful form of healing	51.16	31.41	0.00015	yes
knowledge of ayurveda by rating of reflexology as a useful form of healing	36.52	31.41	0.01336	yes
knowledge of ayurveda by rating of aromatherapy as a useful form of healing	63.89	31.41	0.00000	yes

knowledge of ayurveda by rating of osteopathy as a useful form of healing	37.34	31.41	0.01065	yes
knowledge of ayurveda by rating of knowledge of homeopathy	197.94	31.41	0.00000	yes
knowledge of ayurveda by rating of knowledge of chiropractic	169.81	31.41	0.00000	yes
knowledge of ayurveda by rating of knowledge of acupuncture	158.30	36.42	0.00000	yes
knowledge of ayurveda by rating of knowledge herbalism	265.30	31.41	0.00000	yes
knowledge of ayurveda by rating of knowledge of reflexology	270.67	31.41	0.00000	yes
knowledge of ayurveda by rating of knowledge of aromatherapy	230.62	31.41	0.00000	yes
knowledge of ayurveda by rating of knowledge of osteopathy	182.15	31.41	0.00000	yes
knowledge of ayurveda by referral to a chiropractor	25.69	15.51	0.00119	yes
knowledge of ayurveda by referral to an ayurvedic doctor	72.54	15.51	0.00000	yes
knowledge of ayurveda by referral to a herbalist	22.79	21.03	0.02955	yes
knowledge of ayurveda by referral to a reflexologist	26.47	21.03	0.00921	yes
knowledge of ayurveda by referral to an aromatherapist	33.14	21.03	0.00092	yes
knowledge of ayurveda by referral to an osteopath	31.64	15.51	0.00011	yes
knowledge of ayurveda by perceived efficacy in the treatment of acne	95.95	43.77	0.00000	yes
knowledge of ayurveda by perceived efficacy in the treatment of alcoholism	65.33	43.77	0.10141	yes
knowledge of ayurveda by perceived efficacy in the treatment of allergies	131.75	43.77	0.00000	yes
knowledge of ayurveda by perceived efficacy in the treatment of appendicitis	37.16	26.30	0.00199	yes
knowledge of ayurveda by perceived efficacy in the treatment of arthritis(rheumatoid)	231.29	43.77	0.00000	yes
knowledge of ayurveda by perceived efficacy in the treatment of asthma	128.45	43.77	0.00001	yes
knowledge of ayurveda by perceived efficacy in the treatment of backpain	148.14	43.77	0.00000	yes
knowledge of ayurveda by perceived efficacy in the treatment of bronchitis	127.25	43.77	0.00000	yes
knowledge of ayurveda by perceived efficacy in the treatment of cancer	134.68	43.77	0.00000	yes
knowledge of ayurveda by perceived efficacy in the treatment of common cold	138.69	43.77	0.00000	yes
knowledge of ayurveda by perceived efficacy in the treatment of depression	163.41	43.77	0.00000	yes
knowledge of ayurveda by perceived	99.22	43.77	0.00000	yes

efficacy in the treatment of diabetes mellitus				
knowledge of ayurveda by perceived efficacy in the treatment of fatigue	120.77	43.77	0.01173	yes
knowledge of ayurveda by perceived efficacy in the treatment of hay fever	173.68	43.77	0.00000	yes
knowledge of ayurveda by perceived efficacy in the treatment of hypertension	173.94	43.77	0.00000	yes
knowledge of ayurveda by perceived efficacy in the treatment of insomnia	144.17	43.77	0.00000	yes
knowledge of ayurveda by perceived efficacy in the treatment of myocardial infarction	89.44	43.77	0.00000	yes
knowledge of ayurveda by perceived efficacy in the treatment of menstrual problems	178.35	43.77	0.00000	yes
knowledge of ayurveda by perceived efficacy in the treatment of migraine	167.31	43.77	0.00000	yes
knowledge of ayurveda by perceived efficacy in the treatment of obesity	142.52	43.77	0.00000	yes
knowledge of ayurveda by perceived efficacy in the treatment of pneumonia	102.88	43.77	0.00000	yes
knowledge of ayurveda by perceived efficacy in the treatment to stop smoking	145.55	43.77	0.00000	yes
knowledge of ayurveda by perceived efficacy in the treatment of stress	104.00	43.77	0.06864	yes
knowledge of ayurveda by seeing CM as preventative	13.85	9.49	0.00777	yes
knowledge of ayurveda by seeing CM as primary therapy	36.60	21.03	0.00026	yes
knowledge of ayurveda by seeing CM as supportive therapy	21.48	21.03	0.04382	yes
knowledge of ayurveda by seeing CM as recuperative for illnesses	22.17	15.51	0.00461	yes
knowledge of ayurveda by hearing about CM for the first time from patients	24.43	21.03	0.01779	yes
knowledge of ayurveda by hearing about CM for the first time from doctors and supplementary medical people	27.10	15.51	0.00068	yes
knowledge of ayurveda by hearing about CM for the first time from other sources	26.08	21.03	0.01047	yes
knowledge of ayurveda by using colleagues to find out more about CM	38.88	21.03	0.00011	yes
knowledge of ayurveda by using seminars to find out more about CM	58.51	21.03	0.00000	yes
knowledge of ayurveda by using television/ radio to find out more about CM	27.29	21.03	0.00703	yes
knowledge of ayurveda by using scientific books to find out more about CM	41.98	21.03	0.00003	yes
knowledge of ayurveda by using journals	37.37	21.03	0.00019	yes

to find out more about CM				
knowledge of ayurveda by using layman's books to find out more about CM	28.70	21.03	0.00436	yes
knowledge of ayurveda by basic health care is a privilege	37.33	31.41	0.01068	yes
knowledge of ayurveda by CM should play an active role in the health care system in SA	65.24	31.41	0.00000	yes
knowledge of ayurveda by there is a lack of co- operation in primary health care	46.74	31.41	0.00064	yes
knowledge of ayurveda by CM should be included into the syllabus for undergraduates in the medical profession	53.36	31.41	0.00007	yes
knowledge of herbalism by age	46.79	26.30	0.00063	yes
knowledge of herbalism by university of basic medical qualification	63.82	43.77	0.99416	yes
knowledge of herbalism by practice type	37.46	36.42	0.16404	yes
knowledge of herbalism by incorporation of ayurveda in practice	16.26	15.51	0.09245	yes
knowledge of herbalism by herbalism in practice	42.51	15.51	0.00001	yes
knowledge of herbalism by incorporation of aromatherapy in practice	19.60	15.51	0.03329	yes
knowledge of herbalism by using it on most patients	17.72	9.49	0.00332	yes
knowledge of herbalism by wishing to continue using them	17.87	15.51	0.05723	yes
knowledge of herbalism by rating homeopathy as a useful form of healing	69.54	36.42	0.00006	yes
knowledge of herbalism by rating of chiropractic as a useful form of healing	63.87	31.41	0.00003	yes
knowledge of herbalism by rating of ayurveda as a useful form of healing	46.45	36.42	0.02813	yes
knowledge of herbalism by rating of herbalism as a useful form of healing	111.93	31.41	0.00000	yes
knowledge of herbalism by rating of reflexology as a useful form of healing	53.81	31.41	0.00070	yes
knowledge of herbalism by rating of aromatherapy as a useful form of healing	70.64	31.41	0.00000	yes
knowledge of herbalism by rating of osteopathy as a useful form of healing	66.89	31.41	0.00001	yes
knowledge of herbalism by rating of knowledge of homeopathy	484.61	31.41	0.00000	yes
knowledge of herbalism by rating of knowledge of chiropractic	285.92	31.41	0.00000	yes
knowledge of herbalism by rating of knowledge of acupuncture	315.72	36.42	0.00000	yes
knowledge of herbalism by rating of knowledge of ayurveda	265.30	26.30	0.00000	yes

knowledge of herbalism by rating of knowledge of reflexology	565.25	31.41	0.00000	yes
knowledge of herbalism by rating of knowledge of aromatherapy	456.18	31.41	0.00000	yes
knowledge of herbalism by rating of knowledge of osteopathy	227.63	31.41	0.00000	yes
knowledge of herbalism by referral to chiropractor	17.06	15.51	0.07294	yes
knowledge of herbalism by referral to ayurvedic doctor	18.20	15.51	0.05174	yes
knowledge of herbalism by referral to herbalist	34.85	21.03	0.00258	yes
knowledge of herbalism by referral to reflexologist	32.11	21.03	0.00623	yes
knowledge of herbalism by referral to an aromatherapist	28.44	21.03	0.01898	yes
knowledge of herbalism by referral to an osteopath	21.77	15.51	0.01631	yes
knowledge of herbalism by frequency of referrals	28.95	26.30	0.08865	yes
knowledge of herbalism by perceived efficacy in the treatment of acne	45.52	43.77	0.65357	yes
knowledge of herbalism by perceived efficacy in the treatment of alcoholism	49.36	43.77	0.92508	yes
knowledge of herbalism by perceived efficacy in the treatment of allergies	74.14	43.77	0.20470	yes
knowledge of herbalism by perceived efficacy in the treatment of arthritis(rheumatoid)	168.36	43.77	0.00029	yes
knowledge of herbalism by perceived efficacy in the treatment of asthma	88.61	43.77	0.37297	yes
knowledge of herbalism by perceived efficacy in the treatment of backpain	83.96	43.77	0.65925	yes
knowledge of herbalism by perceived efficacy in the treatment of bronchitis	46.77	43.77	0.98527	yes
knowledge of herbalism by perceived efficacy in the treatment of cancer	63.36	43.77	0.53427	yes
knowledge of herbalism by perceived efficacy in the treatment of common cold	55.74	43.77	0.95317	yes
knowledge of herbalism by perceived efficacy in the treatment of depression	72.72	43.77	0.95675	yes
knowledge of herbalism by perceived efficacy in the treatment of fatigue	98.83	43.77	0.76869	yes
knowledge of herbalism by perceived efficacy in the treatment of hay fever	61.25	43.77	0.76294	yes
knowledge of herbalism by perceived efficacy in the treatment of hypertension	54.10	43.77	0.99639	yes
knowledge of herbalism by perceived efficacy in the treatment of insomnia	86.78	43.77	0.71423	yes
knowledge of herbalism by perceived efficacy in the treatment of menstrual problems	136.62	43.77	0.00112	yes

knowledge of herbalism by perceived efficacy in the treatment of migraine	86.01	43.77	0.91175	yes
knowledge of herbalism by perceived efficacy in the treatment of obesity	48.07	43.77	0.94269	yes
knowledge of herbalism by perceived efficacy in the treatment to stop smoking	57.56	43.77	0.99914	yes
knowledge of herbalism by perceived efficacy in the treatment of stress	111.87	43.77	0.30501	yes
knowledge of herbalism by seeing CM as preventative	14.04	9.49	0.01534	yes
knowledge of herbalism by hearing about CM for the first time from literature	20.94	15.51	0.02150	yes
knowledge of herbalism by hearing about CM for the first time from patients	40.03	21.03	0.00045	yes
knowledge of herbalism by hearing about CM for the first time from other sources	52.70	21.03	0.00000	yes
knowledge of herbalism by using colleagues to find out more about CM	34.54	21.03	0.00286	yes
knowledge of herbalism by using scientific books to find out more about CM	52.57	41.34	0.00000	yes
knowledge of herbalism by using journals to find out more about CM	45.42	41.34	0.00007	yes
knowledge of herbalism by using layman's books to find out more about CM	42.53	41.34	0.00019	yes
knowledge of herbalism by basic health care is a right	39.20	31.41	0.03521	yes
knowledge of herbalism by basic health care is a privilege	38.77	31.41	0.03883	yes
knowledge of herbalism by CM should play an active role in the health care system in SA	79.21	31.41	0.00000	yes
knowledge of herbalism by there is a lack of co-operation in primary health care	60.53	31.41	0.00009	yes
knowledge of herbalism by CM should be included into the syllabus for undergraduates in the medical profession	88.75	31.41	0.00000	yes
knowledge of reflexology by sex of practitioner	14.76	9.49	0.01143	yes
knowledge of reflexology by age of practitioner	43.06	26.30	0.00201	yes
knowledge of reflexology by university of basic medical qualification	95.86	43.77	0.45607	yes
knowledge of reflexology by type of CM	62.40	41.34	0.00296	yes
knowledge of reflexology by practice type	77.49	36.42	0.00000	yes
knowledge of reflexology by incorporation of reflexology in practice	30.62	15.51	0.00068	yes
knowledge of reflexology by using them on most patients	14.71	9.49	0.01166	yes

knowledge of reflexology by wishing to continue using them	17.99	15.51	0.05519	yes
knowledge of reflexology by new outlook on chronic disease	14.20	9.49	0.01441	yes
knowledge of reflexology by now see patient as a whole and not as much at cellular/ biochemical level	14.44	9.49	0.01306	yes
knowledge of reflexology by lack knowledge in CM as a reason for not incorporating it	15.77	15.51	0.10640	yes
knowledge of reflexology by more knowledge as a factor that might encourage use of CM in future	18.03	15.51	0.05439	yes
knowledge of reflexology by client demand as a factor that might encourage use of CM in future	22.17	15.51	0.01425	yes
knowledge of reflexology by clarity on legal aspects as a factor that might encourage use of CM in future	32.76	26.29	0.03583	yes
knowledge of reflexology by rating of homeopathy as a useful form of healing	64.83	36.42	0.00023	yes
knowledge of reflexology by rating of chiropractic as a useful form of healing	70.45	31.41	0.00000	yes
knowledge of reflexology by rating of ayurveda as a useful form of healing	46.67	36.42	0.02678	yes
knowledge of reflexology by rating of herbalism as a useful form of healing	56.40	31.41	0.00032	yes
knowledge of reflexology by rating of reflexology as a useful form of healing	102.03	31.41	0.00000	yes
knowledge of reflexology by rating of aromatherapy as a useful form of healing	84.62	31.41	0.00000	yes
knowledge of reflexology by rating of osteopathy as a useful form of healing	56.07	31.41	0.00036	yes
knowledge of reflexology by rating of knowledge of homeopathy	662.60	31.41	0.00000	yes
knowledge of reflexology by rating of knowledge of chiropractic	499.30	31.41	0.00000	yes
knowledge of reflexology by rating of knowledge of acupuncture	357.58	36.42	0.00000	yes
knowledge of reflexology by rating of knowledge of ayurveda	270.67	26.30	0.00000	yes
knowledge of reflexology by rating of knowledge of herbalism	565.25	31.41	0.00000	yes
knowledge of reflexology by rating of knowledge of aromatherapy	476.99	31.41	0.00000	yes
knowledge of reflexology by rating of knowledge of osteopathy	266.70	31.41	0.00000	yes
knowledge of reflexology by referral to a homeopath	18.88	15.51	0.04187	yes
knowledge of reflexology by referral to a chiropractor	22.23	15.51	0.01396	yes
knowledge of reflexology by referral to	17.49	15.51	0.06421	yes

an ayurvedic doctor				
knowledge of reflexology by referral to a herbalist	21.21	21.02	0.13021	yes
knowledge of reflexology by referral to a reflexologist	52.54	21.02	0.00000	yes
knowledge of reflexology by referral to an aromatherapist	29.86	21.03	0.01243	yes
knowledge of reflexology by referral to an osteopath	27.11	15.51	0.00250	yes
knowledge of reflexology by frequency of referrals	27.60	26.30	0.11900	yes
knowledge of reflexology by perceived efficacy in the treatment of acne	44.94	43.77	0.67594	yes
knowledge of reflexology by perceived efficacy in the treatment of allergies	80.44	43.77	0.09393	yes
knowledge of reflexology by perceived efficacy in the treatment of arthritis(rheumatoid)	163.10	43.77	0.00076	yes
knowledge of reflexology by perceived efficacy in the treatment of asthma	107.01	43.77	0.05359	yes
knowledge of reflexology by perceived efficacy in the treatment of backpain	128.54	43.77	0.00479	yes
knowledge of reflexology by perceived efficacy in the treatment of bronchitis	57.37	43.77	0.86047	yes
knowledge of reflexology by perceived efficacy in the treatment of cancer	51.75	43.77	0.88348	yes
knowledge of reflexology by perceived efficacy in the treatment of common cold	67.30	43.77	0.72491	yes
knowledge of reflexology by perceived efficacy in the treatment of depression	100.85	43.77	0.32138	yes
knowledge of reflexology by perceived efficacy in the treatment of fatigue	111.58	43.77	0.44010	yes
knowledge of reflexology by perceived efficacy in the treatment of hay fever	80.18	43.77	0.19008	yes
knowledge of reflexology by perceived efficacy in the treatment of hypertension	77.26	43.77	0.71257	yes
knowledge of reflexology by perceived efficacy in the treatment of insomnia	80.01	43.77	0.86465	yes
knowledge of reflexology by perceived efficacy in the treatment of menstrual problems	100.68	43.77	0.20723	yes
knowledge of reflexology by perceived efficacy in the treatment of migraine	92.95	43.77	0.79372	yes
knowledge of reflexology by perceived efficacy in the treatment to stop smoking	72.12	43.77	0.96135	yes
knowledge of reflexology by perceived efficacy in the treatment of stress	92.37	43.77	0.80591	yes
knowledge of reflexology by seeing CM as preventative	9.80	9.49	0.08108	yes
knowledge of reflexology by seeing CM as primary therapy	27.39	21.03	0.02572	yes
knowledge of reflexology by seeing CM	27.66	21.03	0.02380	yes

as supportive therapy				
knowledge of reflexology by seeing CM as recuperative for illnesses	34.36	15.51	0.00016	yes
knowledge of reflexology by hearing about CM for the first time from patients	27.83	21.03	0.02267	yes
knowledge of reflexology by hearing about CM for the first time from doctors and supplementary medical people	25.54	15.51	0.00441	yes
knowledge of reflexology by hearing about CM for the first time from other sources	33.40	21.03	0.00413	yes
knowledge of reflexology by using colleagues to find out about CM	45.44	21.03	0.00007	yes
knowledge of reflexology by using seminars to find out about CM	28.09	21.03	0.02100	yes
knowledge of reflexology by using television/radio to find out about CM	27.77	21.03	0.02305	yes
knowledge of reflexology by using scientific books to find out about CM	52.54	21.03	0.00000	yes
knowledge of reflexology by using journals to find out about CM	34.42	21.03	0.00297	yes
knowledge of reflexology by layman's books to find out about CM	37.53	21.03	0.00106	yes
knowledge of reflexology by basic health care is a right	33.11	31.41	0.12834	yes
knowledge of reflexology by basic health care is a privilege	33.52	31.41	0.11848	yes
knowledge of reflexology by CM should play an active role in the health care system in SA	71.99	31.41	0.00000	yes
knowledge of reflexology by there is a lack of co- operation in primary health care	60.72	31.41	0.00008	yes
knowledge of reflexology by CM should be included into the syllabus for undergraduates in the medical profession	78.16	31.41	0.00000	yes
knowledge of aromatherapy by age of practitioner	42.46	26.30	0.00241	yes
knowledge of aromatherapy by educational qualification	24.42	21.03	0.05826	yes
knowledge of aromatherapy by university of basic medical qualification	126.96	43.77	0.01589	yes
knowledge of aromatherapy by qualification in CM	7.24	15.51	0.70249	yes
knowledge of aromatherapy by type of CM	48.60	41.34	0.06302	yes
knowledge of aromatherapy by incorporation of herbalism	22.27	15.51	0.01377	yes
knowledge of aromatherapy by incorporation of aromatherapy	40.00	15.51	0.00002	yes
knowledge of aromatherapy by using	21.97	9.49	0.00053	yes

them on most patients				
knowledge of aromatherapy by relearned history taking	18.71	15.51	0.04413	yes
knowledge of aromatherapy by listen more/ less dismissive	15.85	15.51	0.10391	yes
knowledge of aromatherapy by now see patient as a whole and not as much at cellular/ biochemical level	11.77	9.49	0.03805	yes
knowledge of aromatherapy by find practice richer and more interesting	20.98	15.51	0.02125	yes
knowledge of aromatherapy by more knowledge as a factor that might encourage use of CM in future	17.76	15.51	0.05917	yes
knowledge of aromatherapy by client demand as a factor that might encourage use of CM in future	17.86	15.51	0.05728	yes
knowledge of aromatherapy by rating of chiropractic as a useful form of healing	53.31	31.41	0.00082	yes
knowledge of aromatherapy by rating of ayurveda as a useful form of healing	44.20	36.42	0.04572	yes
knowledge of aromatherapy by rating of herbalism as a useful form of healing	65.56	31.41	0.00002	yes
knowledge of aromatherapy by rating of reflexology as a useful form of healing	73.54	31.41	0.00000	yes
knowledge of aromatherapy by rating of aromatherapy as a useful form of healing	109.02	31.41	0.00000	yes
knowledge of aromatherapy by rating of osteopathy as a useful form of healing	57.26	31.41	0.00025	yes
knowledge of aromatherapy by rating of knowledge of homeopathy	317.21	31.41	0.00000	yes
knowledge of aromatherapy by rating of knowledge of chiropractic	244.77	31.41	0.00000	yes
knowledge of aromatherapy by rating of knowledge of acupuncture	220.22	31.41	0.00000	yes
knowledge of aromatherapy by rating of knowledge of ayurveda	230.62	31.41	0.00000	yes
knowledge of aromatherapy by rating of knowledge of herbalism	456.18	31.41	0.00000	yes
knowledge of aromatherapy by rating of knowledge of reflexology	476.99	31.41	0.00000	yes
knowledge of aromatherapy by rating of knowledge of osteopathy	361.55	31.41	0.00000	yes
knowledge of aromatherapy by referral to a homeopath	43.78	15.51	0.00000	yes
knowledge of aromatherapy by referral to a chiropractor	48.85	15.51	0.00000	yes
knowledge of aromatherapy by referral to an ayurvedic doctor	32.86	15.51	0.00029	yes
knowledge of aromatherapy by referral to a herbalist	47.77	21.03	0.00003	yes
knowledge of aromatherapy by referral to a herbalist	64.11	21.03	0.00000	yes

knowledge of aromatherapy by referral to an aromatherapist	88.04	21.03	0.00000	yes
knowledge of aromatherapy by referral to an osteopath	49.98	15.51	0.00000	yes
knowledge of aromatherapy by frequency of referrals	33.65	26.30	0.02858	yes
knowledge of aromatherapy by perceived efficacy in the treatment of arthritis(rheumatoid)	252.18	43.77	0.00000	yes
knowledge of aromatherapy by perceived efficacy in the treatment of asthma	105.41	43.77	0.06611	yes
knowledge of aromatherapy by perceived efficacy in the treatment of backpain	149.02	43.77	0.00009	yes
knowledge of aromatherapy by perceived efficacy in the treatment of cancer	97.45	43.77	0.00568	yes
knowledge of aromatherapy by perceived efficacy in the treatment of common cold	67.17	43.77	0.72829	yes
knowledge of aromatherapy by perceived efficacy in the treatment of depression	124.05	43.77	0.02433	yes
knowledge of aromatherapy by perceived efficacy in the treatment of fatigue	28.32	43.77	0.15265	yes
knowledge of aromatherapy by perceived efficacy in the treatment of hay fever	66.52	43.77	0.59578	yes
knowledge of aromatherapy by perceived efficacy in the treatment of hypertension	126.11	43.77	0.00254	yes
knowledge of aromatherapy by perceived efficacy in the treatment of insomnia	93.67	43.77	0.51929	yes
knowledge of aromatherapy by perceived efficacy in the treatment of menstrual problems	164.74	43.77	0.00000	yes
knowledge of aromatherapy by perceived efficacy in the treatment of migraine	106.23	43.77	0.44813	yes
knowledge of aromatherapy by perceived efficacy in the treatment of obesity	61.17	43.77	0.61184	yes
knowledge of aromatherapy by perceived efficacy in the treatment to stop smoking	98.20	43.77	0.39062	yes
knowledge of aromatherapy by perceived efficacy in the treatment of stress	119.16	43.77	0.16304	yes
knowledge of aromatherapy by seeing CM as preventative	15.17	9.49	0.00964	yes
knowledge of aromatherapy by hearing about CM for the first time from friends	17.44	15.51	0.06519	yes
knowledge of aromatherapy by hearing about CM for the first time from patients	32.13	21.03	0.00619	yes
knowledge of aromatherapy by hearing about CM for the first time from doctor and supplementary people	21.13	21.03	0.02022	yes
knowledge of aromatherapy by hearing about CM for the first time from other sources	43.23	21.03	0.00015	yes
knowledge of aromatherapy by using colleagues to find out more about CM	45.88	21.03	0.00006	yes

knowledge of aromatherapy by using seminars to find out more about CM	36.05	21.03	0.00174	yes
knowledge of aromatherapy by using television/radio to find out more about CM	33.07	21.03	0.00459	yes
knowledge of aromatherapy by using scientific books to find out more about CM	53.58	21.03	0.00000	yes
knowledge of aromatherapy by using journals to find out more about CM	58.06	21.03	0.00000	yes
knowledge of aromatherapy by using layman's books to find out more about CM	30.80	21.03	0.00933	yes
knowledge of aromatherapy by basic health care is a privilege	48.77	31.41	0.00302	yes
knowledge of aromatherapy by CM should play an active role in the health care system in SA	44.11	31.41	0.01054	yes
knowledge of aromatherapy by CM should be included into the syllabus for undergraduates in the medical profession	44.43	31.41	0.00972	yes
knowledge of osteopathy by age	30.34	26.30	0.06450	yes
knowledge of osteopathy by educational qualification	21.69	21.03	0.11628	yes
knowledge of osteopathy by qualification in CM	21.52	15.51	0.01772	yes
knowledge of osteopathy by type of CM	121.15	41.34	0.00000	yes
knowledge of by osteopathy practice type	96.80	36.42	0.00000	yes
knowledge of osteopathy by relearned history taking	23.17	15.51	0.01015	yes
knowledge of osteopathy by listen more/ less dismissive	19.21	15.51	0.03766	yes
knowledge of osteopathy by rekindled interest in clinical medicine	18.98	15.51	0.04050	yes
knowledge of osteopathy by find practice richer and more interesting	16.06	15.51	0.09801	yes
knowledge of osteopathy by rating of homeopathy as a useful form of healing	36.72	36.42	0.18541	yes
knowledge of osteopathy by rating of chiropractic as a useful form of healing	68.93	31.41	0.00001	yes
knowledge of osteopathy by rating of ayurveda as a useful form of healing	50.24	36.42	0.01170	yes
knowledge of osteopathy by rating of herbalism as a useful form of healing	52.72	31.41	0.00097	yes
knowledge of osteopathy by rating of reflexology as a useful form of healing	55.34	31.41	0.00044	yes
knowledge of osteopathy by rating of aromatherapy as a useful form of healing	59.41	31.41	0.00013	yes
knowledge of osteopathy by rating of osteopathy as a useful form of healing	137.49	31.41	0.00000	yes

knowledge of osteopathy by rating of knowledge of homeopathy	183.13	31.41	0.00000	yes
knowledge of osteopathy by rating of knowledge of chiropractic	229.24	31.41	0.00000	yes
knowledge of osteopathy by rating of knowledge of acupuncture	169.09	36.42	0.00000	yes
knowledge of osteopathy by rating of knowledge of ayurveda	182.15	26.30	0.00000	yes
knowledge of osteopathy by rating of knowledge of herbalism	227.63	31.41	0.00000	yes
knowledge of osteopathy by rating of knowledge of reflexology	266.69	31.41	0.00000	yes
knowledge of osteopathy by rating of knowledge of aromatherapy	361.55	31.41	0.00000	yes
knowledge of osteopathy by referral to a homeopath	33.73	15.51	0.00021	yes
knowledge of osteopathy by referral to a chiropractor	73.25	15.51	0.00000	yes
knowledge of osteopathy by referral to an ayurvedic doctor	29.79	15.51	0.00093	yes
knowledge of osteopathy by referral to a herbalist	40.06	21.03	0.00044	yes
knowledge of osteopathy by referral to a reflexologist	47.58	21.03	0.00003	yes
knowledge of osteopathy by referral to an aromatherapist	42.40	21.03	0.00019	yes
knowledge of osteopathy by referral to an osteopath	79.36	21.03	0.00000	yes
knowledge of osteopathy by perceived efficacy in the treatment of acne	67.18	43.77	0.05282	yes
knowledge of osteopathy by perceived efficacy in the treatment of alcoholism	70.34	43.77	0.30357	yes
knowledge of osteopathy by perceived efficacy in the treatment of allergies	90.80	43.77	0.01900	yes
knowledge of osteopathy by perceived efficacy in the treatment of appendicitis	61.25	43.77	0.00000	yes
knowledge of osteopathy by perceived efficacy in the treatment of arthritis(rheumatoid)	140.28	43.77	0.02722	yes
knowledge of osteopathy by perceived efficacy in the treatment of asthma	90.24	43.77	0.32817	yes
knowledge of osteopathy by perceived efficacy in the treatment of backpain	107.48	43.77	0.10098	yes
knowledge of osteopathy by perceived efficacy in the treatment of bronchitis	95.46	43.77	0.02328	yes
knowledge of osteopathy by perceived efficacy in the treatment of cancer	81.83	43.77	0.07747	yes
knowledge of osteopathy by perceived efficacy in the treatment of common cold	77.38	43.77	0.40269	yes
knowledge of osteopathy by perceived efficacy in the treatment of depression	106.45	43.77	0.19842	yes
knowledge of osteopathy by perceived	43.17	43.77	0.32412	yes

efficacy in the treatment of fatigue				
knowledge of osteopathy by perceived efficacy in the treatment of hay fever	88.16	43.77	0.07015	yes
knowledge of osteopathy by perceived efficacy in the treatment of hypertension	120.61	43.77	0.00672	yes
knowledge of osteopathy by perceived efficacy in the treatment of insomnia	93.31	43.77	0.52975	yes
knowledge of osteopathy by perceived efficacy in the treatment of myocardial infarction	99.80	43.77	0.00000	yes
knowledge of osteopathy by perceived efficacy in the treatment of menstrual problems	134.81	43.77	0.00157	yes
knowledge of osteopathy by perceived efficacy in the treatment of migraine	89.25	43.77	0.86430	yes
knowledge of osteopathy by perceived efficacy in the treatment of obesity	84.91	43.77	0.04932	yes
knowledge of osteopathy by perceived efficacy in the treatment of pneumonia	74.42	43.77	0.00077	yes
knowledge of osteopathy by perceived efficacy in the treatment to stop smoking	108.28	43.77	0.16609	yes
knowledge of osteopathy by perceived efficacy in the treatment of stress	96.12	43.77	0.72055	yes
knowledge of osteopathy by seeing CM as preventative	14.87	9.45	0.01094	yes
knowledge of osteopathy by hearing about CM for the first time from patients	28.95	21.03	0.01632	yes
knowledge of osteopathy by hearing about CM for the first time from other sources	25.58	21.03	0.04271	yes
knowledge of osteopathy by using television/radio to find out more about CM	25.02	23.80	0.04965	yes
knowledge of osteopathy by using scientific books to find out more about CM	23.80	21.03	0.06861	yes
knowledge of osteopathy by using journals to find out more about CM	28.19	21.03	0.02042	yes
knowledge of osteopathy by using layman's books to find out more about CM	43.78	21.03	0.00012	yes
knowledge of osteopathy by basic health care is a privilege	39.93	31.41	0.02963	yes
knowledge of osteopathy by comprehensive health care is a right	43.83	36.42	0.04939	yes
knowledge of osteopathy by CM should play an active role in the health care system in SA	44.26	31.41	0.01014	yes
knowledge of osteopathy by there is a lack of co-operation in primary health care	46.56	31.41	0.00552	yes
knowledge of osteopathy by CM should	42.96	31.41	0.01412	yes

be included into the syllabus for undergraduates in the medical profession				
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4.6. Crosstabulations between the gender of practitioner and his/her knowledge in complementary medicine.

Table 21: Crosstabulation between gender of practitioner and their knowledge in homeopathy

	Female	Male	Total	
0	3	8	11(3.4%)	
1	10	60	70(21.7%)	
2	17	112	129(40.1%)	
3	25	69	94(29.2%)	
4	4	12	16(5%)	
5	0	2	2(0.6%)	
Total	59(18.3%)	263(81.7%)	322(100%)	

0- no response

1- know nothing about it/them

5- know everything there is to know about it.

There is no significant association between the sex of practitioner and his/her knowledge in homeopathy at the $\alpha = 0.05$ level of significance.

($P = 0.11492$)

Table 22: Crosstabulation between gender of practitioner and their knowledge in chiropractic

	Female	Male	Total	
0	3	7	10(3.1%)	
1	12	51	63(19.6%)	
2	17	93	110(34.2%)	
3	23	80	103(32%)	
4	4	27	31(9.6%)	
5	0	5	5(1.6%)	
Total	59(18.3%)	263(81.7%)	322(100%)	

0- no response

1- know nothing about it/them

5- know everything there is to know about it.

There is no significant association between the sex of practitioner and his/her knowledge in chiropractic at the alpha = 0.05 level of significance.

(P = 0.49703)

Table 23: Crosstabulation between gender of practitioner and their knowledge in acupuncture

	Female	Male	Total	
0	2	7	9(2.8%)	
1	11	59	70(21.7%)	
2	15	86	101(31.4%)	
3	23	76	99(30.7%)	
4	6	30	36(11.2%)	
5	2	4	6(1.9%)	
		1	1(0.3%)	
Total	59(18.3%)	263(81.7%)	322(100%)	

0- no response

1- know nothing about it/them

5- know everything there is to know about it.

There is no significant association between the sex of practitioner and his/her knowledge in acupuncture at the alpha = 0.05 level of significance.

P= 0.67518)

Table 24: Crosstabulation between gender of practitioner and their knowledge in ayurveda

	Female	Male	Total
0	6	8	14(4.3%)
1	42	189	231(71.7%)
2	6	40	46(14.3%)
3	2	20	22(6.8%)
4	3	6	9(2.8%)
5	0	0	0(0%)
Total	59(18.3%)	263(81.7%)	322(100%)

0- no response

1- know nothing about it/them

5- know everything there is to know about it.

There is no significant association between the sex of practitioner and his/her knowledge in ayurveda at the $\alpha = 0.05$ level of significance.

($P = 0.05868$)

Table 25: Crosstabulation between gender of practitioner and their knowledge in herbalism

	Female	Male	Total	
0	2	9	11(3.4%)	
1	23	130	153(47.5%)	
2	19	82	101(31.4%)	
3	13	34	47(14.6%)	
4	2	7	9(2.8%)	
5	0	1	1(0.3%)	
Total	59(18.3%)	263(81.7%)	322(100%)	

0- no response

1- know nothing about it/them

5- know everything there is to know about it.

There is no significant association between the sex of practitioner and his/her knowledge in herbalism at the $\alpha = 0.05$ level of significance.

($P = 0.52430$)

Table 26: Crosstabulation between gender of practitioner and their knowledge in reflexology

	Female	Male	Total	
0	3	10	13(4%)	
1	21	112	133(41.3%)	
2	12	89	101(31.4%)	
3	17	43	60(18.6%)	
4	6	7	13(4%)	
5	0	2	2(0.6%)	
Total	59(18.3%)	263(81.7%)	322(100%)	

0- no response

1- know nothing about it/them

5- know everything there is to know about it.

Reject H_0 :- there is significant association between the sex of practitioner and his/her knowledge in reflexology at the $\alpha = 0.05$ level of significance.

($P = 0.01143$)

Table 27: Crosstabulation between gender of practitioner and their knowledge in aromatherapy

	Female	Male	Total	
0	5	14	19(5.9%)	
1	20	129	149(46.3%)	
2	19	80	99(30.7%)	
3	9	30	39(12.1%)	
4	5	8	13(4%)	
5	1	2	3(0.9%)	
Total	59(18.3%)	263(81.7%)	322(100%)	

- 0- no response
- 1- know nothing about it/them
- 5- know everything there is to know about it.

There is no significant relationship between the sex of practitioner and his/her knowledge in aromatherapy at the $\alpha = 0.05$ level of significance.

($P = 0.16672$)

Table 28: Crosstabulation between gender of practitioner and their knowledge in osteopathy

	Female	Male	Total	
0	4	15	19(5.9%)	
1	31	148	179(55.6%)	
2	13	71	84(26.1%)	
3	8	24	32(9.9%)	
4	3	3	6(1.9%)	
5	0	2	2(0.6%)	
Total	59(18.3%)	263(81.7%)	322(100%)	

- 0- no response
- 1- know nothing about it/them
- 5- know everything there is to know about it.

There is no significant association between the sex of practitioner and his/her knowledge in osteopathy at the alpha = 0.05 level of significance.
(P = 0.29708)

4.7. Crosstabulation between age of practitioner and knowledge in CM

Table 29: Crosstabulation between age of practitioner and knowledge in homeopathy

	24-35 years	36-45 years	46-55 years	56-65 years	>65 years	Total	
0	0	3	2	3	3	11(3.4%)	
1	12	24	16	9	9	70(21.7%)	
2	32	47	29	13	8	129(40.1%)	
3	31	25	22	11	5	94(29.2%)	
4	3	7	3	2	1	16(5%)	
5	0	0	1	1	0	2(0.6%)	
Total	78(24.2%)	106(32.9%)	73(22.7%)	39(12.1%)	26(8.1%)	322(100%)	

0- no response

1- know nothing about it/them

5- know everything there is to know about it.

There is no significant association between the age of practitioner and his/her knowledge in homeopathy at the $\alpha = 0.05$ level of significance.

($P = 0.19015$)

Table 30: Crosstabulation between age of practitioner and knowledge in chiropractic

	24-35 years	36-45 years	46-55 years	56-65 years	>65 years	Total	
0	1	2	1	3	3	10(3.1%)	
1	18	19	14	8	4	63(19.6%)	
2	29	40	24	8	9	110(34.2%)	
3	20	36	25	13	9	103(32%)	
4	10	8	7	5	1	31(9.6%)	
5	0	1	2	2	0	5(1.6%)	
Total	78(24.2%)	106(32.9%)	73(22.7%)	39(12.1%)	26(8.1%)	322(100%)	

0- no response

1- know nothing about it/them

5- know everything there is to know about it.

There is no significant association between the age of practitioner and his/her knowledge in chiropractic at the $\alpha = 0.05$ level of significance.

($P = 0.24358$)

Table 31: Crosstabulation between age of practitioner and knowledge in acupuncture

	24-35 years	36-45 years	46-55 years	56-65 years	>65 years	Total	
0	2	2	0	3	2	9(2.8%)	
1	12	23	15	9	11	70(21.7%)	
2	30	31	23	11	6	101(31.4%)	
3	20	37	23	12	7	99(30.7%)	
4	11	12	10	3	0	36(11.2%)	
5	2	1	2	1	0	6(1.9%)	
	1	0	0	0	0	1(0.3%)	
Total	78(24.2%)	106(32.9%)	73(22.7%)	39(12.1%)	26(8.1%)	322(100%)	

0- no response

1- know nothing about it/them

5- know everything there is to know about it.

There is no significant association between the age of practitioner and his/her knowledge in acupuncture at the $\alpha = 0.05$ level of significance.

($P = 0.30103$)

Table 32: Crosstabulation between age of practitioner and knowledge in ayurveda

	24-35 years	36-45 years	46-55 years	56-65 years	>65 years	Total	
0	1	5	1	2	5	14(4.3%)	
1	50	81	50	31	19	231(71.7%)	
2	16	12	14	3	1	46(14.3%)	
3	5	6	7	3	1	22(6.8%)	
4	6	2	1	0	0	9(2.8%)	
5	0	0	0	0	0	0(0%)	
Total	78(24.2%)	106(32.9%)	73(22.7%)	39(12.1%)	26(8.1%)	322(100%)	

0- no response

1- know nothing about it/them

5- know everything there is to know about it.

There is a significant association between the age of practitioner and his/her knowledge in ayurveda at the $\alpha = 0.05$ level of significance.

($P = 0.00304$)

Table 33: Crosstabulation between age of practitioner and knowledge in herbalism

	24-35 years	36-45 years	46-55 years	56-65 years	>65 years	Total	
0	1	2	0	3	5	11(3.4%)	
1	29	56	34	23	11	153(47.5%)	
2	32	29	27	7	6	101(31.4%)	
3	13	16	11	3	4	47(14.6%)	
4	3	3	0	3	0	9(2.8%)	
5	0	0	1	0	0	1(0.3%)	
Total	78(24.2%)	106(32.9%)	73(22.7%)	39(12.1%)	26(8.1%)	322(100%)	

0- no response

1- know nothing about it/them

5- know everything there is to know about it.

There is a significant association between the age of practitioner and his/her knowledge in herbalism at the $\alpha = 0.05$ level of significance.

($P = 0.00063$)

Table 34: Crosstabulation between age of practitioner and knowledge in reflexology

	24-35 years	36-45 years	46-55 years	56-65 years	>65 years	Total	
0	1	3	1	3	5	13(4%)	
1	26	43	33	17	14	133(41.3%)	
2	27	40	17	12	5	101(31.4%)	
3	17	19	17	5	2	60(18.6%)	
4	7	1	4	1	0	13(4%)	
5	0	0	1	1	0	2(0.6%)	
Total	78(24.2%)	106(32.9%)	73(22.7%)	39(12.1%)	26(8.1%)	322(100%)	

0- no response

1- know nothing about it/them

5- know everything there is to know about it.

There is significant association between the age of practitioner and his/her knowledge in reflexology at the $\alpha = 0.05$ level of significance.

($P = 0.00201$)

Table 35: Crosstabulation between age of practitioner and knowledge in aromatherapy

	24-35 years	36-45 years	46-55 years	56-65 years	>65 years	Total	
0	2	5	1	5	6	19(5.9%)	
1	29	49	38	19	14	149(46.3%)	
2	31	36	19	9	4	99(30.7%)	
3	9	10	14	5	1	39(12.1%)	
4	5	6	0	1	1	13(4%)	
5	2	0	1	0	0	3(0.9%)	
Total	78(24.2%)	106(32.9%)	73(22.7%)	39(12.1%)	26(8.1%)	322(100%)	

0- no response

1- know nothing about it/them

5- know everything there is to know about it.

There is significant association between the age of practitioner and his/her knowledge in aromatherapy at the $\alpha = 0.05$ level of significance.

($P = 0.00241$)

Table 36: Crosstabulation between age of practitioner and knowledge in osteopathy

	24-35 years	36-45 years	46-55 years	56-65 years	>65 years	Total	
0	4	5	0	4	6	19(5.9%)	
1	46	60	38	21	14	179(55.6%)	
2	22	29	21	7	5	84(26.1%)	
3	4	10	11	6	1	32(9.9%)	
4	2	1	2	1	0	6(1.9%)	
5	0	1	1	0	0	2(0.6%)	
Total	78(24.2%)	106(32.9%)	73(22.7%)	39(12.1%)	26(8.1%)	322(100%)	

0- no response

1- know nothing about it/them

5- know everything there is to know about it.

There is significant association between the age of practitioner and his/her knowledge in osteopathy at the $\alpha = 0.05$ level of significance.

($P = 0.06450$)

4.8. Crosstabulations between practitioners knowledge of CM and his/her rating of it as a useful form of healing.

Table 37: Crosstabulation between practitioners knowledge in Homeopathy and his/her rating of it as a useful form of healing

	0	1	2	3	4	5		Total	
0	6	2	1	1	1	0	0	11(3.4%)	
1	26	19	10	7	7	1	0	70(21.7%)	
2	12	17	39	49	10	1	1	129(40.1%)	
3	2	18	22	38	10	4	0	94(29.2%)	
4	0	2	4	3	4	3	0	16(5%)	
5	0	2	0	0	0	0	0	2(0.6%)	
total	46(14.3%)	60(18.6%)	76(23.6%)	98(30.4%)	32(9.9%)	9(2.8%)	1(0.3%)	322(100%)	

vertical rating: (rating of knowledge)

0- no response

1- know nothing about it/them

5- know everything there is to know about it.

horizontal rating: (rating of it as a useful form of healing)

0-no response

1- not effective

5- very effective

There is significant association between practitioners knowledge in homeopathy and his/her rating of homeopathy as a useful form of healing at the $\alpha = 0.05$ level of significance.

($P = 0.00000$)

Table 38: Crosstabulation between practitioners knowledge on Chiropractic and his/her rating of it as a useful form of healing

	0	1	2	3	4	5	Total	
0	6	1	0	3	0	0	10(3.1%)	
1	22	15	7	11	6	2	63(19.6%)	
2	10	5	29	54	11	1	110(34.2%)	
3	4	10	18	45	20	6	103(32%)	
4	0	5	4	9	7	6	31(9.6%)	
5	0	3	0	1	1	0	5(1.6%)	
total	42(13%)	39(12.1%)	58(18%)	123(38.2%)	45(14%)	15(4.7%)	322(100%)	

vertical response (rating of knowledge)

0- no response

1- know nothing about it/them

5- know everything there is to know about it.

horizontal response (rating of it as a useful form of healing)

0- no response

1- not effective

5- very effective

There is significant association between practitioners knowledge in chiropractic and his/her rating of chiropractic as a useful form of healing at the $\alpha = 0.05$ level of significance.

($P = 0.00000$)

Table 39: Crosstabulation between practitioners knowledge on Ayurveda and his/her rating of it as a useful form of healing

	0	1	2	3	4	5		Total	
0	11	2	0	1	0	0	0	14(4.3%)	
1	111	85	21	9	1	3	1	231(71.7%)	
2	7	8	11	17	2	1	0	46(14.3%)	
3	4	4	3	7	3	1	0	22(6.8%)	
4	0	1	2	1	3	2	0	9(2.8%)	
5	0	0	0	0	0	0	0	0(0%)	
total	133(41.3%)	100(31.1%)	37(11.5%)	35(10.9%)	9(2.8%)	7(2.2%)	1(0.3%)	322(100%)	

vertical response (rating of knowledge)

0- no response

1- know nothing about it/them

5- know everything there is to know about it.

horizontal response(rating of it as a useful form of healing)

0- no response

1- not effective

5- very effective

There is significant association between practitioners knowledge in ayurveda and his/her rating of ayurveda as a useful form of healing at the $\alpha = 0.05$ level of significance.

($P = 0.00000$)

Table 40: Crosstabulation between practitioners knowledge on Herbalism and his/her rating of it as a useful form of healing.

	0	1	2	3	4	5	Total	
0	9	0	1	1	0	0	11(3.4%)	
1	55	61	19	17	1	0	153(47.5%)	
2	10	28	33	25	3	2	101(31.4%)	
3	6	9	14	14	3	1	47(14.6%)	
4	0	2	4	0	1	2	9(2.8%)	
5	0	1	0	0	0	0	1(0.3%)	
total	80(24.8%)	101(31.4%)	71(22%)	57(17.7%)	8(2.5%)	5(1.6%)	322(100%)	

vertical response (rating of knowledge)

0- no response

1- know nothing about it/them

5- know everything there is to know about it.

horizontal response (rating of it as a useful form of healing)

0- no response

1- not effective

5- very effective

There is significant association between practitioners knowledge in herbalism and his/her rating of herbalism as a useful form of healing at the $\alpha = 0.05$ level of significance.

($P = 0.00000$)

Table: 41- Crosstabulation between practitioners knowledge on Reflexology and his/her rating of it as a useful form of healing

	0	1	2	3	4	5	Total	
0	9	3	0	1	0	0	13(4%)	
1	50	44	24	15	0	0	133(41.4%)	
2	11	34	35	16	4	1	101(31.5%)	
3	1	22	19	11	6	0	59(18.4%)	
4	0	3	2	4	4	0	13(4%)	
5	0	2	0	0	0	0	2(0.6%)	
total	71(22.1%)	108(33.6%)	80(24.9%)	47(14.6%)	14(4.4%)	1(0.3%)	321(100%)	

vertical response (rating of knowledge)

0- no response

1- know nothing about it/them

5- know everything there is to know about it.

horizontal response (rating of it as a useful form of healing)

0- no response

1- not effective

5- very effective

There is significant association between practitioners knowledge in reflexology and his/her rating of reflexology as a useful form of healing at the $\alpha = 0.05$ level of significance.

($P = 0.00000$)

Table 42: Crosstabulation between practitioners knowledge on aromatherapy and his/her rating of it as a useful form of healing

	0	1	2	3	4	5	Total	
0	12	3	1	3	0	0	19(5.9%)	
1	54	58	29	8	0	0	149(46.3%)	
2	8	38	28	19	4	2	99(30.7%)	
3	2	18	11	3	3	2	39(12.1%)	
4	0	3	3	3	4	0	13(4%)	
5	0	1	1	1	0	0	3(0.9%)	
total	76(23.6%)	121(37.6%)	73(22.7%)	37(11.5%)	11(3.4%)	4(1.2%)	322(100%)	

vertical response (rating of knowledge)

0- no response

1- know nothing about it/them

5- know everything there is to know about it.

horizontal response (rating of it as a useful form of healing)

0- no response

1- not effective

5- very effective

There is significant association between practitioners knowledge in aromatherapy and his/her rating of aromatherapy as a useful form of healing at the $\alpha = 0.05$ level of significance.

($P = 0.00000$)

Table 43: Crosstabulation between practitioners knowledge on Osteopathy and his/her rating of it as a useful form of healing

	0	1	2	3	4	5	Total	
0	14	1	0	3	1	0	19(5.9%)	
1	70	55	38	14	1	1	179(55.6%)	
2	9	19	26	23	6	1	84(26.1%)	
3	1	4	7	15	3	2	32(9.9%)	
4	0	2	3	0	1	0	6(1.9%)	
5	0	1	0	0	0	1	2(0.6%)	
total	94(29.2%)	82(25.5%)	74(23%)	55(17.1%)	12(3.7%)	5(1.6%)	322(100%)	

vertical response (rating of knowledge)

0-no response

1-know nothing about it/them

5- know everything there is to know about it.

horizontal response (rating of it as a useful form of healing)

0- no response

1- not effective

5- very effective

There is significant association between practitioners knowledge in osteopathy and his/her rating of osteopathy as a useful form of healing at the $\alpha = 0.05$ level of significance.
($P = 0.00000$)

4.9. Crosstabulation between practitioners knowledge of CM and referrals to CM practitioners.

Table 44: Crosstabulations between practitioners knowledge of homeopathy and referrals to homeopaths.

	0	1	2	Total	
0	2	2	7	11(3.4%)	
1	4	5	61(70(21.7%)		
2	7	38	84	129(40.1%)	
3	0	35	59	94(29.2%)	
4	0	5	11	16(5%)	
5	0	0	2	2(0.6%)	
Total	13(4%)	85(26.4%)	224(69.6%)	322(69.9%)	

vertical response(rating of knowledge)

0- no response

1- know nothing about it/them

5- know everything there is to know about it.

horizontal response(rating of referrals)

0- no response

1- yes

5- no

There is significant association between practitioners knowledge in homeopathy and referrals to homeopaths at the $\alpha = 0.05$ level of significance.

($P = 0.00060$)

Table 45: Crosstabulations between practitioners knowledge of chiropractic and referrals to chiropractors

	0	1	2	Total	
0	2	3	5	10(3.1%)	
1	2	19	42	63(19.6%)	
2	0	52	58	110(34.2%)	
3	2	64	37	103(32%)	
4	0	20	11	31(9.6%)	
5	0	3	2	5(1.6%)	
Total	6(1.9%)	161(50%)	155(48.1%)	322(100%)	

vertical response (rating of knowledge)

0- no response

1- know nothing about it/them

5- know everything there is to know about it.

horizontal response (rating of referrals)

0- no response

1- yes

2- no

There is significant association between practitioners knowledge in chiropractic and referrals to chiropractors.

(P = 0.00001)

Table 46: Crosstabulations between practitioners knowledge of ayurveda and referrals to ayurvedic doctors.

	0	1	2	Total	
0	4	0	10	14(4.3%)	
1	11	3	217	231(71.7%)	
2	2	3	41	46(14.3%)	
3	0	7	15	22(6.8%)	
4	0	3	6	9(2.8%)	
5	0	0	0	0(0%)	
Total	17(5.3%)	16(5%)	289(89.8%)	322(100%)	

vertical response (rating of knowledge)

0- no response

1- know nothing about it/them

5- know everything there is to know about it.

horizontal response (rating of referrals)

0- no response

1- yes

2- no

There is significant association between practitioners knowledge in ayurveda and referrals to ayurvedic doctors at the $\alpha = 0.05$ level of significance.

($P = 0.00000$)

Table 47: Crosstabulations between practitioners knowledge of herbalism and referrals to herbalists.

	0	1	2		Total	
0	3	0	8	0	11(3.4%)	
1	6	5	142	0	153(47.5%)	
2	9	4	88	0	101(31.4%)	
3	1	8	37	1	47(14.6%)	
4	0	0	9	0	9(2.8%)	
5	0	0	1	0	1(0.3%)	
Total	19(5.9%)	17(5.3%)	285(88.5%)	1(0.3%)	322(100%)	

vertical response (rating of knowledge)

0- no response

1- know nothing about it/them

5- know everything there is to know about it.

horizontal response (rating of referrals)

0- no response

1- yes

2- no

There is significant association between practitioners knowledge in herbalism and referral to herbalists at the $\alpha = 0.05$ level of significance.

($P = 0.00258$)

Table 48: Crosstabulations between practitioners knowledge of reflexology and referrals to reflexologists.

	0	1	2		Total	
0	4	0	9	0	13(4%)	
1	8	11	113	1	133(41.3%)	
2	5	11	85	0	101(31.4%)	
3	0	16	44	0	60(18.6%)	
4	1	7	5	0	13(4%)	
5	0	1	1	0	2(0.6%)	
Total	18(5.6%)	46(14.3%)	257(79.8%)	1(0.3%)	322(100%)	

vertical response (rating of knowledge)

0- no response

1- know nothing about it/them

5- know everything there is to know about it.

horizontal response (rating of referrals)

0- no response

1- yes

2- no

There is significant association between practitioners knowledge in reflexology and referrals to reflexologists at the $\alpha = 0.05$ level of significance.

($P = 0.00000$)

Table 49: Crosstabulations between practitioners knowledge of aromatherapy and referrals to aromatherapists.

	0	1	2		Total	
0	7	2	10	0	19(5.9%)	
1	5	9	135	0	149(46.3%)	
2	5	17	76	1	99(30.7%)	
3	0	12	27	0	39(12.1%)	
4	0	8	5	0	13(4%)	
5	0	2	1	0	3(0.9%)	
Total	17(5.3%)	50(15.5%)	254(78.9%)	1(0.3%)	322(100%)	

vertical response (rating of referrals)

0- no response

1- know nothing about it/them

5- know everything there is to know about it.

horizontal response (rating of referrals)

0- no response

1- yes

2- no

There is significant association between practitioners knowledge in aromatherapy and referrals to aromatherapists at the $\alpha = 0.05$ level of significance.

($P = 0.00000$)

Table 50: Crosstabulations between practitioners knowledge of osteopathy and referrals to osteopaths .

	0	1	2	Total	
0	7	0	12	19(5.9%)	
1	10	2	167	179(55.6%)	
2	3	6	75	84(26.1%)	
3	0	10	22	32(9.9%)	
4	1	1	4	6(1.9%)	
5	0	0	2	2(0.6%)	
Total					

vertical response (rating of knowledge)

0- no response

1- know nothing about it/them

5- know everything there is to know about it.

horizontal response (rating of referrals)

0- no response

1- yes

2- no

There is significant association between practitioners knowledge in osteopathy and referrals to osteopaths at the $\alpha = 0.05$ level of significance.

($P = 0.00000$)

4.10. Crosstabulations between practitioners knowledge in CM and whether he/she believes CM should play an active role in health care in South Africa.

Table 51: Crosstabulation between practitioners knowledge in homeopathy and whether he/she believes complementary medicine should play an active role in health care in South Africa.

	0	1	2	3	4	5	Total	
0	4	1	3	1	1	1	11(3.4%)	
1	6	11	15	29	5	4	70(21.7%)	
2	1	15	39	48	19	7	129(40.1%)	
3	3	7	31	31	13	9	94(29.2%)	
4	0	6	3	2	1	4	16(5%)	
5	0	0	0	0	0	2	2(0.6%)	
Total	14(4.3%)	40(12.4%)	91(28.3%)	111(34.5%)	39(12.1%)	27(8.4%)	322(100%)	

vertical response (rating of knowledge)

0- no response

1- know nothing about it/them

5- know everything there is to know about it.

horizontal response:

0- no response

1- strongly agree

2- agree

3- neutral

4- disagree

5- strongly disagree

There is significant association between practitioners knowledge in homeopathy and whether he/she believes CM should play an active role in health care in South Africa at the alpha = 0.05 level of significance.

(P = 0.00000)

Table 52: Crosstabulation between practitioners knowledge in chiropractic and whether he/she believes complementary medicine should play an active role in health care in South Africa.

	0	1	2	3	4	5	Total	
0	3	2	3	1	0	1	10(3.1%)	
1	3	10	15	28	4	3	63(19.6%)	
2	4	13	32	35	19	7	110(34.2%)	
3	2	14	30	38	12	7	103(32%)	
4	1	1	10	8	4	7	31(9.6%)	
5	1	0	1	1	0	2	5(1.6%)	
Total	14(4.3%)	40(12.4%)	91(28.3%)	111(34.5%)	39(12.1%)	27(8.4%)	322(100%)	

vertical response(rating of knowledge)

0- no response

1- know nothing about it/them

5- know everything there is to know about it.

horizontal response:

0- no response

1- strongly agree

2- agree

3- neutral

4- disagree

5- strongly disagree

There is significant association between practitioners knowledge in chiropractic and whether he/she believes CM should play an active role in health care in South Africa at the alpha = 0.05 level of significance.

(P = 00184)

Table 53: Crosstabulation between practitioners knowledge in acupuncture and whether he/she believes complementary medicine should play an active role in health care in South Africa.

	0	1	2	3	4	5	Total	
0	4	2	2	1	0	0	9(2.8%)	
1	5	9	18	26	7	5	70(21.7%)	
2	3	15	30	35	12	6	101(31.4%)	
3	2	7	27	39	16	8	99(30.7%)	
4	0	7	11	8	4	6	36(11.2%)	
5	0	0	2	2	0	6	36(11.2%)	
	0	0	1	0	0	0	1(0.3%)	
Total	14(4.3%)	40(12.4%)	91(28.3%)	111(34.5%)	39(12.1%)	27(8.4%)	322(100%)	

vertical response (rating of knowledge)

0- no response

1- know nothing about it/them

5- know everything there is to know about it.

horizontal response:

0- no response

1- strongly agree

2- agree

3- neutral

4- disagree

5- strongly disagree

There is significant association between practitioners knowledge in acupuncture and whether he/she believes CM should play an active role in health care in South Africa at the alpha = 0.05 level of significance.

(P = 0.00039)

Table 54: Crosstabulation between practitioners knowledge in ayurveda and whether he/she believes complementary medicine should play an active role in health care in South Africa.

	0	1	2	3	4	5	Total	
0	5	1	4	3	0	1	14(4.3%)	
1	7	19	60	90	32	23	231(71.7%)	
2	2	13	15	11	4	1	46(14.3%)	
3	0	6	7	5	2	2	22(6.8%)	
4	0	1	5	2	1	0	9(2.8%)	
5	0	0	0	0	0	0	0(0%)	
Total	14(4.3%)	40(12.4%)	91(28.3%)	111(34.5%)	39(12.1%)	27(8.4%)	322(100%)	

vertical response (rating of knowledge)

0- no response

1- know nothing about it/them

5- know everything there is to know about it.

horizontal response:

0- no response

1- strongly agree

2- agree

3- neutral

4- disagree

5- strongly disagree

There is significant association between practitioners knowledge in ayurveda and whether he/she believes CM should play an active role in health care in South Africa at the alpha = 0.05 level of significance.

(P = 0.00000)

Table 55: Crosstabulation between practitioners knowledge in herbalism and whether he/she believes complementary medicine should play an active role in health care in South Africa.

	0	1	2	3	4	5	Total	
0	5	1	4	1	0	0	11(3.4%)	
1	7	17	42	57	19	11	153(47.5%)	
2	0	12	32	39	11	7	101(31.4%)	
3	2	9	11	11	9	5	47(14.6%)	
4	0	1	2	3	0	3	9(2.8%)	
5	0	0	0	0	0	1	1(0.3%)	
Total	14(4.3%)	40(12.4%)	91(28.3%)	111(34.5%)	39(12.1%)	27(8.4%)	322(100%)	

vertical response (rating of knowledge)

0- no response

1- know nothing about it/them

5- know everything there is to know about it.

horizontal response:

0- no response

1- strongly agree

2- agree

3- neutral

4- disagree

5- strongly disagree

There is significant association between practitioners knowledge in herbalism and whether he/she believes CM should play an active role in health care in South Africa at the alpha = 0.05 level of significance.

(P = 0.00000)

Table 56: Crosstabulation between practitioners knowledge in reflexology and whether he/she believes complementary medicine should play an active role in health care in South Africa.

	0	1	2	3	4	5	Total	
0	5	2	4	1	0	1	13(4%)	
1	5	17	33	52	17	9	133(41.3%)	
2	4	13	31	30	15	8	101(31.4%)	
3	0	6	17	24	7	6	60(18.6%)	
4	0	2	6	4	0	1	13(4%)	
5	0	0	0	0	0	2	2(0.6%)	
Total	14(4.3%)	40(12.4%)	91(28.3%)	111(34.5%)	39(12.1%)	27(8.4%)	322(100%)	

vertical response (rating of knowledge)

0- no response

1- know nothing about it/them

5- know everything there is to know about it.

horizontal response:

0- no response

1- strongly agree

2- agree

3- neutral

4- disagree

5- strongly disagree

There is significant association between practitioners knowledge in reflexology and whether he/she believes CM should play an active role in health care in South Africa at the alpha = 0.05 level of significance.

(P =0.00000)

Table 57: Crosstabulation between practitioners knowledge in aromatherapy and whether he/she believes complementary medicine should play an active role in health care in South Africa.

	0	1	2	3	4	5	Total	
0	5	2	6	5	0	1	19(5.9%)	
1	6	14	37	61	20	11	149(46.3%)	
2	2	12	34	29	14	8	99(30.7%)	
3	1	9	8	13	4	4	39(12.1%)	
4	0	2	5	3	1	2	13(4%)	
5	0	1	1	0	0	1	3(0.9%)	
Total	14(4.3%)	40(12.4%)	91(28.3%)	111(34.5%)	39(12.1%)	27(8.4%)	322(100%)	

vertical response (rating of knowledge)

0- no response

1- know nothing about it/them

5- know everything there is to know about it.

horizontal response:

0- no response

1- strongly agree

2- agree

3- neutral

4- disagree

5- strongly disagree

There is significant association between practitioners knowledge in aromatherapy and whether he/she believes CM should play an active role in health care in South Africa at the alpha = 0.05 level of significance.

(P = 0.01054)

Table 58: Crosstabulation between practitioners knowledge in osteopathy and whether he/she believes complementary medicine should play an active role in health care in South Africa.

	0	1	2	3	4	5	Total	
0	5	1	6	5	1	1	19(5.9%)	
1	5	19	43	73	25	14	179(55.6%)	
2	3	13	31	23	8	6	84(26.1%)	
3	1	6	7	9	4	5	32(9.9%)	
4	0	0	3	1	1	1	6(1.9%)	
5	0	1	1	0	0	0	2(0.6%)	
Total	14(4.3%)	40(12.4%)	91(28.3%)	111(34.5%)	39(12.1%)	27(8.4%)	322(100%)	

vertical response (rating of knowledge)

0- no response

1- know nothing about it/them

5- know everything there is to know about it.

horizontal response:

0- no response

1- strongly agree

2- agree

3- neutral

4- disagree

5- strongly disagree

There is significant association between practitioners knowledge in osteopathy and whether he/she believes CM should play an active role in health care in South Africa at the alpha = 0.05 level of significance.

(P = 0.01014)

4.11.Results from log linear analysis.

Results from log-linear tests revealed that the following three interaction effects were significant at the alpha = 0.05 level of significance. Table 59 gives a summary.

Table 59: Summary of results from log- linear analysis

- X43 = client demand
- X45 = nothing would encourage
- X46 = clarity on legal aspects
- X94 = primary therapy

Interaction effect	Observed Z- value	Tabulated Z- value	Significance
x43 by x45 by x46	-2.14	1.96	yes
x45 by x46 by x94	2.15	1.96	yes
x45 by x46	3.13	1.96	yes

Interpretations of significant results from log-linear analysis are given as follows:

There is a significant three- way interdependence between client demand, nothing would encourage and clarity on legal aspects.

There is a significant three- way interdependence between nothing would encourage, clarity on legal aspects and primary therapy.

There is a significant two- way interdependence between incentives and clarity on legal aspects.

Results from log- linear analysis are fairly similar to results obtained from chi-square tests.

This similarity is attributable to the large size of the sample.

CHAPTER 5: THE DISCUSSION:

5.1. Demographical analysis.

Out of the 1000 questionnaires posted out to medical practitioners there was a response of 322(32.2%). This was a very low response rate in comparison to a postal survey conducted among general practitioners in the Netherlands in 1989 to determine the belief in the efficacy of alternative medicine. The study in the Netherlands obtained a response rate of 74%. This high response rate could be due to the fact that two reminders were posted to the practitioners. There were no reminders in this survey and this could have been a factor for the low response rate.

Male respondents outnumber female respondents more than 4 to 1(81.68% to 18.32%) This is a clear indication that there are more male practitioners than female as the questionnaires were randomly posted out and not subjected to any form of discrimination as far as the gender of the practitioner was concerned.

The Pearson Chi-square test showed no significant association at a 5% level of significance between the gender of the practitioner and his/her knowledge in homeopathy ,chiropractic, acupuncture, ayurveda, herbalism, aromatherapy and osteopathy.

However, there was significant association between the gender of the practitioner and his/her knowledge in reflexology.

The largest group of respondents were between the 36-45 age group(32.90%). This was followed by 24.20% of practitioners within the 24-35 age group. Thereafter the number of respondents decreased as the age group increased .

As the survey was not subjected to any discrimination as far as the age of the practitioner was concerned it can be concluded that the majority of practitioners are young.

The Pearson chi-square test showed no significant association at a 5% level of significance between the age of the practitioner and his/her knowledge in homeopathy, chiropractic and acupuncture.

However there was significant association between the age of practitioner and his/her knowledge in ayurveda, herbalism, reflexology, aromatherapy and osteopathy.

The largest group of practitioners were from Gauteng(35%) and Western Province(34%). This was expected because these two provinces have a larger population of practitioners and a larger percentage of the questionnaires were posted to these provinces.

The majority of practitioners participating in this questionnaire are practising solo(59.63%) or in partnership (31.99%).

Only a small percentage of the respondents had any qualification in complementary medicine(6.2%) and most of these practitioners had qualifications in acupuncture(2.8%).

5.2. Incorporation of CM in practice.

Only a small percentage of respondents incorporate complementary medicine in their practice. The number of respondents incorporating complementary medicine into their practice (table 5) seems to be greater than the number who have qualifications in complementary medicine (table 2). Of the positive respondents 14.74% incorporate homeopathy, 13.59% incorporate manipulation and 11.36% incorporate acupuncture. Of the respondents who incorporate CM into their practices 2.17% use CM on all patients, 1.86% use CM on most patients and 81.06% use CM on some patients. The positive respondents(28.26%) wished to continue using them, 7.76% of the positive respondents did not wish to continue using them.

A large percentage (33.10%) indicated that CM did not affect their practice/outlook. Only a small percentage has indicated any major changes in their practise/outlook. 17.70% indicated that they now see the patient as a whole and not as much at cellular/biochemical level. 18.63% indicated that CM has rekindled their interest in clinical level.

Of the practitioners who do not incorporate CM in their practices 52.48% indicated that it is because they lack the knowledge in Complementary medicine. 32.92% indicated that they lack confidence in CM 17.39% feel it is of no value and 17.39% feel that it could be dangerous to the patient.

At least a quarter of the respondents (24.84%) see themselves including it in the future, 39.75% indicated that may include it in their future practices and 31.68% indicated that do not wish to include in their future practices.

The majority of medical practitioners indicated that more knowledge and proof of efficacy are factors that might encourage the use of Complementary Medicine in the future. One of my hypothesis was that clarity on legal aspects might encourage the use of CM in the future, however only 13.98% of respondents indicated this as a factor.

5.3. Knowledge of CM.

The majority of medical practitioners have little knowledge on most of the individual complementary therapies and therefore have rated most of them as not being very effective forms of healing (Tables 12.1 to 12.7 and 13.1 to 13.8).

The least known complementary therapy was ayurveda with 71.1% of practitioners indicating that they know nothing about it and 0% indicating that they know everything about it.

According to the Pearson chi-square test there is significant association at the $\alpha = 0.05$ level of significance between practitioners knowledge in :-

- * homeopathy and rating it as a useful form of healing
- * chiropractic and rating it as a useful form of healing

- * ayurveda and rating it as a useful form of healing
- * herbalism and rating it as a useful form of healing
- * reflexology and rating it as a useful form of healing
- * aromatherapy and rating it as a useful form of healing
- * osteopathy and rating it as a useful form of healing.

The Pearson chi-square test at the $\alpha = 0.05$ level of significance revealed that there were no significant associations between the gender of the practitioner and his/her knowledge in homeopathy, chiropractic, acupuncture, ayurveda, herbalism, aromatherapy and osteopathy (tables 20-24, tables 26 and 27). However there was significant association between the gender of the practitioner and his/her knowledge in reflexology at $\alpha = 0.05$ level of significance (table 25). According to Pearson chi-square tests there were no significant associations between the age of practitioner and his/her age of practitioner and his/her knowledge in homeopathy and acupuncture (tables 28 and 30) but there were significant associations between age of practitioner and his/her knowledge in ayurveda, herbalism, reflexology, aromatherapy and osteopathy at the $\alpha = 0.05$ level of significance (table 29, tables 31-35).

The lack of an effective understanding between complementary medicine and allopathic medicine definitely stems from the great lack of knowledge of CM. Without this understanding between the professions there will not be an effective form of health care system in South Africa where patients will benefit.

5.4. Referrals to complementary therapists.

The two Complementary therapies that have made some headway in this regard have been the chiropractic and homeopathic professions which have received a large percentage referrals from the medical profession.

According to Pearson chi-square tests there is a significant association between :- * the practitioners knowledge in homeopathy and their referrals to homeopaths

* the practitioners knowledge in chiropractic and their referrals to chiropractors

* the practitioners knowledge in ayurveda and their referrals to ayurvedic doctors

* the practitioners knowledge in herbalism and their referrals to herbalists

* the practitioners knowledge in reflexology and their referrals to reflexologists

* the practitioners knowledge in aromatherapy and their referrals to aromatherapists

* the practitioners knowledge in osteopathy and their referrals to osteopaths.

The majority of referrals by medical practitioners to any individual Complementary Therapy have been to the chiropractic profession ,this been indicated by 49.69% of referrals to chiropractors. This is followed 26.09% of medical practitioners referring patients to homeopaths. Only 15.53% of practitioners have referred patients to aromatherapists and 14.29% of practitioners have referred patients to reflexologists. Ayurveda, herbalism and osteopathy have received the least referrals by medical practitioners. The results suggest that the chiropractic and homeopathic profession have a greater recognition from the medical profession in South Africa. This may be due to the

fact that these professions have established themselves by offering proper tertiary qualifications with a thorough grounding in traditional medical subjects with special emphasis to diagnostic skills, also including research as part of its academic programme.

5.5. Perceived efficacy of complementary medicine.

In the analysis of individual conditions (Table 16) homeopathy was perceived as being effective in the treatment of allergies, asthma, common cold and hay fever. Chiropractic was perceived as being beneficial in the treatment of backpain, this could account for the large percentage of referrals (50%) to chiropractors. The other therapies were perceived as not being very effective in the treatment of the majority of conditions, this could account for the relatively low rate of referrals to these therapies (Table 14 and 16).

It has been acknowledged in this study so far that medical practitioners do not have much knowledge in CM but the fact that medical practitioners at this stage specify which CM are likely to be effective in which conditions should make health policy makers cautious about the treatment of the different complementary therapies as an umbrella term at least for the time being until the various complementary bodies make a concerted effort to raise the educational standards of their individual practitioners.

5.6. View of complementary medicine.

When asked how medical practitioners see CM, the majority of practitioners indicated that they see CM as supportive therapy(77.01%). 27.95% of practitioners see CM as recuperative for illnesses, 26.39% see CM as preventative and 14.59% see CM as primary therapy.

5.7. Validation or evidence considered important before accepting complementary medicine as useful for patient.

Majority of practitioners (83.85%) consider clinical trials as important validation or evidence before they accept CM as useful for patients, 56.21% consider theoretical scientific basis important, 19.25% consider colleagues experience important and 12.73% consider colleagues recommendation important. These results suggest that the medical profession needs more scientific evidence before they would accept Complementary Medicine as a useful form of healing. There is a pool of chiropractic and homeopathic research already completed and currently been completed at Natal Technikon in South Africa. There is also a wealth of research material on complementary medicine conducted internationally available. This has to be accessed by the medical profession if their acceptance of complementary medicines is based on clinical trials.

5.8. Information enquiry about complementary medicine.

The majority of medical practitioners heard about CM in literature for the first time(50.00%). A small percentage of practitioners(5.59%) heard about CM for the first time from this questionnaire.

Colleagues are sometimes used by 41.30% of practitioners and often used by 9.01% of practitioners as a source of information to find out about CM. Seminars are sometimes used by 24.22% of practitioners and often used by 5.28% of practitioners as a source of information . Television and radio are sometimes used by 41.93% of practitioners and often used by 4.35% of practitioners to find out more information. Scientific books are sometimes used by 40.06% of practitioners and often used by 13.04% of practitioners as sources of information. Journals are sometimes used by 44.10% of practitioners and often used by 17.39% of practitioners as sources of information. layman's books are sometimes used by 31.68% of practitioners and often used by 6.83% of practitioners as sources of information.

5.9. Health Care

Equity is generally accepted as an important goal of social and economic policy. A commitment to equity in health implies, as a minimum, equal access to appropriate health services for all individuals. Today a large number of nations include the right to health care in their constitutions and all industrialised nations, with the exception of USA and South Africa, have a national health system which guarantees their citizens access to health care (Volmink *et al* 1993). The majority of medical practitioners (58.70%) in this study strongly agree that basic health care is a right. This view is consistent with those expressed in the credo of the College of Medicine of South Africa which states that 'equitable access to health care is a right and not a privilege' (Volmink *et al* 1993).

On the matter of Complementary Medicine playing an active role in the health care system in South Africa 12.11% of medical practitioners strongly agree on this matter, 27.64% agree and 34.47% are neutral. Only 12.42% disagree and 8.70% strongly disagree on this matter. This question was answered by 95.34% of the respondents.

According to Pearson chi-square test there is significant association between the practitioners knowledge in all the individual complementary medicines and their belief that complementary medicine should play an active role in health care in South Africa at the $\alpha = 0.05$ level of significance.

Twenty-eight percent of medical practitioners strongly agree that there is a lack of co-operation in primary health care. If we exclude the neutral percentage, 39.75% are favourable in the inclusion of Complementary Medicine in South Africa in comparison

with the 21.12% who are not favourable. South Africa is rapidly undergoing social, economic and political change and the key to the development of an effective health care system is the involvement of the Complementary medical community in the formation of an expanded public health community. It appears from the results that many medical practitioners have no problem with the involvement of CM in the health care system in SA. This is very positive in establishing a new public health care system .It will lead to a richer and more efficient health system with practitioners having a better understanding of the other professions. And hopefully by the various professions working together it will be seen that health care can be much more effective by team effort by all professions resulting in a broader scope of practice.

On the question of whether Complementary Medicine should be included into the syllabus for undergraduates in the medical profession 15.22% of the respondents strongly agree that this should be so, 32.61% agree, 23.91% are neutral, 12.42% disagree and 10.56% strongly disagree.

These findings are presented here as a contribution to future health care policy and I would like to thank all those practitioners who took the time to complete the questionnaire and mail it back .

CHAPTER 6: CONCLUSIONS AND RECOMMENDATIONS

The following conclusions can be drawn from this survey:

1. Only an insignificant proportion of medical practitioners has any qualifications in Complementary Medicine.

2. Only a small percentage of medical practitioners incorporates any Complementary therapies into their practices.

3. Only a small percentage of medical practitioners indicated that clarity on legal aspects might encourage the use of CM in the future indicating that this is an insignificant factor. The majority of medical practitioners who do not incorporate CM into their practices indicated that it is because they lack knowledge in CM.

4. The majority of medical practitioners indicated that more knowledge and proof of efficacy are factors that might encourage the use of CM in the future.

5. Although the majority of medical practitioners rated the CM as being ineffective as useful forms of healing, it can be concluded that the majority of medical practitioners are actually not well informed about CM and they lack knowledge in CM, especially in ayurveda and osteopathy where 72.05% of the respondents indicated that they know nothing about ayurveda and 56.83% of the respondents indicated that they know nothing about osteopathy.

6. The majority of medical practitioners have not referred patients to the individual Complementary therapies except for Chiropractic where 49.69% of practitioners indicated that they have referred patients to this profession. Homeopaths have received 26.09% of referrals. Ayurveda, herbalism and osteopathy have received the least referrals by medical practitioners.

7. The majority of medical practitioners see CM as supportive therapy and only a small percentage of practitioners sees Complementary Therapy as primary.

8. On the issue of general health matters in the country the majority of medical practitioners participating in this questionnaire agree that basic health care is a right.

9. It appears from the results that many medical practitioners have no problem with CM playing an active role in health care in SA.

10. On the question of whether CM should be included into the syllabus for undergraduates in the medical profession 15.22% of the respondents strongly agreed, 32.61% agreed, 23.91% are neutral. Only 12.42% disagreed and 10.56% strongly disagreed.

Recommendations:

1. It is strongly suggested that a comparative study be conducted in the year 2000 to assess the trends in the perception of medical practitioners towards Complementary medicine as we are living in a very dynamic and changing society.
2. Since the majority of the respondents indicated that they lack knowledge in the field of Complementary Medicine it is very strongly recommended that CM should be introduced to the medical profession as part of their undergraduate syllabus. This is for a better understanding of the other professions and for future inter-professional co-operation.
3. The medical profession in South Africa must be informed about the educational standards of the individual Complementary medicines and their methods of treatment.
4. The medical profession should engage in constructive enquiry into the different complementary medicines.
5. All professions engaged in the care of patients should be vigilant in their efforts to protect people, vulnerable through illness or lack of knowledge, from exploitation by the profit motive, poor ethics, bad medicine, pseudoscience and fraud. In accepting these negative potentials within the complementary medical phenomenon, and indeed within medicine, orthodoxy bears a responsibility to patients to welcome and develop proper

communication which CM as it has a lot of wisdom to offer in the healing of patients (Reilly and Taylor 1993.)

6. For CM the time for false modesty or exaggerated claims has passed; it is time to share its wisdom, and demonstrate its worth, together with the body of medicine.

7. In going forward the complementary medical community should not be asked to re-invent the wheel; they merit help from our existing seats of learning. It is hard to see how there will be any meaningful progress in the next decade without Government supported research funds (Reilly and Taylor 1993.) Research to be done and existing research done nationally and internationally needs to enter the libraries of the medical profession.

8. For now it is human contact and dialogue, shared work- clinical and academic - and critically evaluated experience that should be the basis for the next stage of development of CM. Much time, effort, patience and reflection will be needed. To succeed, this must take place within the body of medicine, with access to its resources, its expertise, and its science.

9. The treatment of 'complementary medicine' as an umbrella term should be used with caution in South Africa if the individual fields of complementary medicine is striving for recognition from the medical societies. The majority of practitioners in this survey

(83.5%) indicated that clinical trials as being important validation or evidence for accepting them as being useful for patients . At this time in South Africa there are only two complementary professions conducting research trials- namely homeopathy and chiropractic.

10. The individualisation of the complementary fields would lead to a better understanding of the individual complementary medicine by the medical profession and would lead to more inter-professional referrals.

The following changes may help to improve the questionnaire if a similar survey is conducted:

- 1.Acupuncture should be included in questions 16,18 and 19 as it has been unfortunately left out (Appendix C).
- 2.Osteopathy should be included in questions 9 and 19.
3. The instruction after question 9 should read “if yes to Q9 answer Q10, Q11 and Q12.....if no to Q9 answer Q13 and Q14. ” Fortunately all respondents answered this section of the questionnaire correctly (Appendix C).
4. Question 1 regarding gender of practitioner should have male as option 1 and female as option 2.

REFERENCES:

Cochran, W.G. 1997. Sampling Techniques. New York: John Wiley and Sons. 428p. ISBN 0-471-02939-4.

Ernst, E. 1994. Complementary Medicine : Changing attitudes. Complementary Therapies in Medicine, 2: 121-122

Green, D. and Pinkney-Atkinson, V.J. 1994: Quality in health care South African Medical Journal, 84 (3): 129-130

Izhar, N. 1990. Patient Origins and usage of a Unani Clinic in Aligarh Town, India. Social Science Medicine, 31 (5): 1139-1141

Knipschild, P. Etal 1990. Belief in the efficacy of Alternative Medicine among General Practitioners in the Netherlands. Social Science Medicine, 31 (5): 625-626

Kruger, J. 1993. The quest for ethics in Medicine SAMJ South African Medical Journal, 83 (8) 553-554

Lewith, G.T. and Kenyon 1994. The Centre for the study of Complementary Medicine : a decade of research. Complementary Therapies in Medicine, 2: 164-168

Milani,M. 1994. Letter to registered practitioners, November 1994.

Monckton, J. 1994. Research- The way forward. Complementary Therapies in Medicine 2: 41-44

Northcott H.C. and Bachynsky, J.A. 1993. Concurrent Utilization of Chiropractic, prescription Medicines, non-prescription medicines and alternative health care Social Science Medicine 37 (3) : 431-435

Norusis,M.J.1990. SPSS/PC+ Advanced statistics 4.0 for the IBM PC/XT/AT? and PS/2. SPSS Inc.Chicago.366p.ISBN 0-923967-13-3.

Pillay, Y.G. 1993. Primary Care in S.A. South African Medical Journal 83 (8): 606

Reilly, D. & Taylor, M 1993. RCCM Newsletter Complementary therapies in Medicine, 2 3-39

Steenkamp,C.S. 1985. South African's experience of chiropractic andhomeopathy.

Pretoria: Human Sciences and Research Council.

Van Rensburg, H.C.J. and Fourie , A. 1994. Inequalities in South African Medical Health Care . South African Medical Journal, 84 (2): 95-102

Vickers,A.J. 1994. Complementary Medicine, Intermediate Medicine and the degree of Intervention. Complementary Therapies in Medicine, 2: 123-127

Vincent, C. and Furham, A 1994. The perceived efficacy of Complementary and Orthodox Medicine preliminary finding and the development of a questionnaire . Complementary Therapies in Medicine, 2 : 128-134

Volmink,J.A. Etal 1993. Attitudes of Private and General Practitioners toward health care in S.A. South African Medical Journal, 83: 827-831

Vorster, M.A. 1994. Future health systems. South African Medical Journal, 84: 42

Walpole, R.E. 1983. Elementary Statistical Concepts. New York: Macmillan.442p. ISBN 0-02-424020-b

Yach , D. 1994. Towards health for all S.Africans. South African Medical Journal, 84 (5): 250-253

Yach, D. and Tollman, S.M. 1993. Public Health Initiatives in SA. in the 1940's and 1950 Lessons for a post-apartheid era.American Journal of Public Health, 83 (7) : 1043-1049

Young, Q.D. 1993. Health Care Reform. A new Public Health Movement. American Journal of Public Health, 83 (7) : 945-946

APPENDIX

TECHNIKON
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DEPARTMENT OF HOMOEOPATHY

31/05/95

Tel. (031) 204 2542
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Dear Doctor

RESEARCH

I am presently a final year student doing my Master's Diploma in Technology: Homoeopathy. The academic programme, which is the first independent homoeopathic tertiary programme in the western world, is designed to extend over five years of which the first three will provide the future homoeopathic practitioner with a thorough grounding in traditional medical subjects with special emphasis on diagnostic skills. Research is part of the academic requirements followed by one year internship at an approved institution. I am currently conducting a survey amongst medical practitioners to determine their perception with regard to the role of Complementary Medicine in health care in South Africa.

On 11th October 1994, an historic decision, the South African Medical and Dental Council removed rule 7(2) from its regulations and in so doing removed all restrictions on co-operation between the homoeopathic profession and the medical profession. This is a wonderful breakthrough and will open doors to new opportunities for inter-professional relationships.

Great change and great progress is taking place amongst our professions and you can be part of this by participating in this questionnaire, which to my knowledge is the first systematic study to explore the attitudes of medical practitioners to complementary medicine in South Africa. The benefits of this questionnaire will contribute to future health care policies in South Africa so that future health services can become more co-ordinated and effective in their functioning.

Thank you for the courtesy of your assistance.

MISS REENA SUKDEV

DR P.R. SPIES
HEAD: DEPT. OF HOMOEOPATHY

INSTRUCTIONS

MEDICAL PRACTITIONER'S PERCEPTION QUESTIONNAIRE

Thank you for agreeing to participate in this study.

INSTRUCTIONS

1. Please circle the number corresponding to your correct answer.
2. Your answers to the questions in this questionnaire will be regarded as strictly confidential.
3. Please ensure that you answer all the questions and do not skip any.

QUESTIONNAIRE

FOR OFFICIAL
USE ONLY

Q1. SEX: FEMALE MALE
 1 2

Q2. AGE IN YEARS:

.....
24-35 36-45 46-55 56-65 >65
.....
1 2 3 4 5

Q3. PROVINCE WHERE PRACTICE IS BASED

.....

Q4. EDUCATIONAL QUALIFICATIONS:

.....
.....

Q5. UNIVERSITY AT WHICH BASIC MEDICAL
QUALIFICATION WAS OBTAINED

.....

Q6. QUALIFICATIONS IN COMPLEMENTARY THERAPY
(i.e. HOMEOPATHY, CHIROPRACTIC, ACU-
PUNCTURE, AYURVEDA, HERBALISM, REFLEXO-
LOGY, AROMATHERAPY, OSTEOPATHY)

YES NO

1 2 -----

Q7. IF YES TO Q6, PLEASE STATE THEM

Q8. PRACTICE TYPE:

SOLD PARTNERSHIP HOSPITAL/CLINIC OTHER

1 2 3 4

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USE ONLY

Q9. DO YOU INCORPORATE ANY OF THE FOLLOWING
COMPLEMENTARY THERAPIES IN YOUR PRACTICE?

	<u>YES</u>	<u>NO</u>	
HOMEOPATHY	1	2	.....
MANIPULATION	1	2	.....
ACUPUNCTURE	1	2	.....
AYURVEDA	1	2	.....
HERBALISM	1	2	.....
REFLEXOLOGY	1	2	.....
AROMATHERAPY	1	2	.....

If yes to Q9 answer Q10 and Q11.

If no to Q9 answer Q12 and Q13.

Q10. HOW OFTEN DO YOU USE IT/THEM?

On all patients	1.....	.....
On most patients	2.....	.....
On some patients	3.....	.....

Q11. DO YOU WISH TO CONTINUE USING IT/THEM?

<u>YES</u>	<u>NO</u>	
1	2

Q12. HOW HAS COMPLEMENTARY MEDICINE IN-
FLUENCED YOUR OUTLOOK/PRACTICE?

(Circle the number/s that apply)

- Relearned history taking	1.....	.....
- Listen more/less dis- missive	2.....	.....
- Now find patient's expecta- tions for NSAID antibiotics, psychotropic difficult	3.....
- Now want to refer patients ...	4.....
- New outlook on chronic disease	5.....

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- Now see patient as a whole
and not as much at cellular/
biochemical level 6.....
- More aware of patient dis-
satisfaction with conven-
tional medicine 7.....
- Rekindled interest in clini-
cal medicine 8.....
- Find practice richer and more
interesting 9.....
- Did not affect my practice/
outlook 10.....
- I can do without it 11.....

Q13. THE REASON/S YOU DO NOT INCORPORATE IT IN
YOUR PRACTICE:

(Circle the number/s that apply)

- Lack confidence in Comple-
mentary Medicine 1.....
- Lack self confidence in the
application 2.....
- Never heard of them 3.....
- Lack knowledge in Comple-
mentary Medicine 4.....
- Lack of time 5.....
- Lack of opportunity 6.....
- Partner's attitude 7.....
- Lack of opportunity due to
patient's resistance 8.....
- Feel it is of no value 9.....
- Could be dangerous to the
patient 10.....

Q14. DO YOU SEE YOURSELF INCLUDING IT IN
FUTURE PRACTICE?

YES

NO

MAYBE

1

2

3

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Q15. WHAT FACTORS WOULD YOU SAY MIGHT EN-
COURAGE THE USE OF COMPLEMENTARY
MEDICINE IN THE FUTURE?

- More knowledge 1.....
- Client demand 2.....
- Proof of efficacy 3.....
- Nothing would encourage 4.....
- Clarity on legal aspects ... 5.....

Q16. HOW WOULD YOU RATE THE FOLLOWING AS A
USEFUL FORM OF HEALING?

(Please ring appropriate number)

1 - Not effective

2 - Very effective

Homeopathy	1	2	3	4	5	.....
Chiropractic	1	2	3	4	5	.....
Ayurveda	1	2	3	4	5	.....
Herbalism	1	2	3	4	5	.....
Reflexology	1	2	3	4	5	.....
Aromatherapy	1	2	3	4	5	.....
Osteopathy	1	2	3	4	5	.....

Q17. HOW WOULD YOU RATE YOUR KNOWLEDGE ON:

1 - know nothing about it/them

5 - know everything there is to know
about it.

Homeopathy.....	1	2	3	4	5	.....
Chiropractic	1	2	3	4	5
Acupuncture	1	2	3	4	5
Ayurveda	1	2	3	4	5
Herbalism	1	2	3	4	5
Reflexology	1	2	3	4	5

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Aromatherapy 1 2 3 4 5
Osteopathy 1 2 3 4 5

Q18. HAVE YOU EVER REFERRED YOUR PATIENTS
TO A/AN:

	<u>YES</u>	<u>NO</u>	
- Homeopath	1	2	.....
- Chiropractor	1	2	.....
- Ayurvedic doctor .	1	2	.....
- Herbalist	1	2	.....
- Reflexologist	1	2	.....
- Aromatherapist ...	1	2	.....
- Osteopath	1	2	.....

If yes to Q18, specify how frequently.

Last 6 months 1
Last 2 years 2
Other (specify)
.....

Q19. PERCEIVED EFFICACY OF COMPLEMENTARY
MEDICINE: (Circle the one which you
consider to be beneficial in the
following conditions)

H - Homeopathy H2 - Herbalism
C - Chiropractic R - Reflexology
A - Ayurveda A2 - Aromatherapy

	<u>H1</u>	<u>C</u>	<u>A1</u>	<u>H2</u>	<u>R</u>	<u>A2</u>	
Acne	1	2	3	4	5	6	.....
Alcoholism	1	2	3	4	5	6	.....
Allergies	1	2	3	4	5	6
Appendicitis	1	2	3	4	5	6
Arthritis	1	2	3	4	5	6
(Rheumatoid)							
Asthma	1	2	3	4	5	6

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H - Homeopathy H2 - Herbalism
C - Chiropractic R - Reflexology
A - Ayurveda A2 - Aromatherapy

	H1	C	A1	H2	R	A2	
Backpain	1	2	3	4	5	6	.....
Bronchitis	1	2	3	4	5	6	.....
Cancer	1	2	3	4	5	6	.....
Common Cold	1	2	3	4	5	6	.....
Depression	1	2	3	4	5	6	.....
Diabetes Mellitus	1	2	3	4	5	6	.....
Fatigue	1	2	3	4	5	6	.....
Hay Fever	1	2	3	4	5	6	.....
Hypertension	1	2	3	4	5	6	.....
Insomnia	1	2	3	4	5	6	.....
Myocardial infarc- tion	1	2	3	4	5	6	.....
Menstrual problems	1	2	3	4	5	6	.....
Migraine	1	2	3	4	5	6	.....
Obesity	1	2	3	4	5	6	.....
Pneumonia	1	2	3	4	5	6	.....
Stopping smoking	1	2	3	4	5	6	.....
Stress	1	2	3	4	5	6	.....

Q20. HOW DO YOU SEE COMPLEMENTARY THERAPY?

(Circle the number/s that apply)

PREVENTATIVE 1.....

PRIMARY THERAPY 2.....

SUPPORTIVE THERAPY 3.....

RECUPERATIVE FOR ILLNESSES . 4.....

Q21. WHAT KIND OF VALIDATION OR EVIDENCE DO YOU CONSIDER IMPORTANT BEFORE YOU WOULD ACCEPT COMPLEMENTARY MEDICINE AS USEFUL FOR YOUR PATIENT?

Theoretical scientific basis .. 1 .....	.....
Clinical trials 2.....	.....
Colleague's experience 3.....	.....
Colleague's recommendation 4.....	.....

Q22. WHERE DID YOU HEAR ABOUT COMPLEMENTARY MEDICINE FOR THE FIRST TIME?

This questionnaire 1.....	.....
Friends 2.....	.....
Literature 3.....	.....
Patients 4.....	.....
Doctors and supplementary medical people 5.....	.....
Other 6.....	.....

Q23. HOW MUCH DO YOU USE EACH OF THE FOLLOWING SOURCES OF INFORMATION TO FIND OUT ABOUT COMPLEMENTARY THERAPY?

	<u>NEVER</u>	<u>SOMETIMES</u>	<u>OFTEN</u>	
Colleagues 1	2	3	.....
Seminars 1	2	3	.....
TV/Radio 1	2	3	.....
Scientific books . 1	2	3	.....
Journals 1	2	3	.....
Layman's books ... 1	2	3	.....

Q24. HEALTH CARE: (Circle your answer)

- 1 Strongly agree
- 2 Agree
- 3 Neutral
- 4 Disagree
- 5 Strongly Disagree

Basic health care is a right. 1 2 3 4 5

Basic health care is a
privelege. 1 2 3 4 5

Comprehensive health care is
a right 1 2 3 4 5

Complementary medicine
should play an active role
in the health care system
in South Africa 1 2 3 4 5

There is a lack of co-
operation in primary health
care 1 2 3 4 5

Complementary Medicine
should be included into the
syllabus for undergraduates
in the medical profession . 1 2 3 4 5