

**A SURVEY TO DETERMINE THE PERCEPTION OF THE
THIRD YEAR MEDICAL STUDENTS AT THE
UNIVERSITY OF CAPE TOWN AND THE UNIVERSITY OF
KWAZULU NATAL TOWARDS HOMOEOPATHY**

**By:
SARA THORVALDSEN**

Mini-dissertation submitted in partial compliance with the requirement for the Master's Degree in Technology: Homoeopathy in the Faculty of Health Services at the Durban University of Technology.

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

_____ Date _____
Signature of Student

Approved for final submission:

_____ Date _____
Signature of Supervisor
Dr R. Steele B.A., H.D.E., M. Tech (HOM)

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DEDICATION

I dedicate this research to my parents, Norman Michael Thorvaldsen and Barbara Teresa Thorvaldsen. I could never thank them enough for their unconditional love, support and help. Through every challenge in my life they have always been there for me no matter what, to laugh with me, to wipe my tears, with good advice and continual encouragement. Without them the road that has enabled me accomplish my goal would have been very rocky. I treasure them and thank them for being wonderful parents.

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ABSTRACT

The aim of this study was to shed light on the perceptions of third year medical students towards homoeopathy. Medical students represent the future health care professionals in our country, and their opinions about complementary health are very important. The data collected from the questionnaires provides valuable information towards increasing awareness and acceptance of homoeopathy amongst the medical fraternity.

In this study a survey method was utilized. The total number of questionnaires distributed were 347, and of these 181 questionnaires were returned completed (a return rate of 52%). There were 83 students from a class of 184 students at the University of Cape Town who participated in the study (a return rate of 45%), and there were 98 students from a class of 197 at the University of KwaZulu Natal who participated in the study (a return rate of 50%).

In general, there was a very positive response from the respondents. The majority of the respondents (96%) had heard of homoeopathy, with a substantial percentage (21%) being familiar or very knowledgeable about it. Only 4% of the respondents had never heard of homoeopathy, which shows that awareness of complementary medicine is growing.

Sixty eight percent of respondents indicated an interest in learning more about homoeopathy and ninety two percent of the respondents felt it is important for a medical doctor to know about alternative forms of treatment. There were also seventy nine percent of respondents that felt that it is important for there to be improved communication between allopaths and homoeopaths. It is excellent to see that these respondents are open minded and realise that it is necessary for medical practitioners to have a well-rounded knowledge so as to become a better practitioner.

Just over half of the respondents (52%) were certain that there are training institutions in this country. This shows some level of awareness of homoeopathic training. There were a reasonable percentage of respondents (22%) that correctly stated that the course in homoeopathy is of 5 years duration. Thirty eight percent of respondents thought a homoeopath is a skilled primary care practitioner and fifty five percent of the respondents felt that homoeopathy could be incorporated into the hospital care paradigm. These are very positive results and show that homoeopathy has the potential to become more widely accepted amongst the medical fraternity.

The future of homoeopathy depends on improved public awareness and understanding of homoeopathy, and the transformation of attitudes of those in all the medical professions. If we bring about more education of homoeopathy to medical students, then the relationship between medical practitioners and

homoeopathic practitioners will be enhanced and this will only benefit patients in the future.

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CHAPTER 1

1 INTRODUCTION

A couple of centuries ago, before science began to single mindedly focus its attention on the purely physical aspect of Nature, homoeopathy and allopathy walked hand in hand to serve the health needs of humankind. As the physical sciences became more successful, tolerance for ideas that could not be tested by the same criteria diminished and homoeopathy began to feel the pressure of second-class citizenship. Physical science became more and more quantitative and predictably powerful, and homoeopathy began to fall out of favour with practicing physicians (Vithoukias, 1980:xi).

The 20th Century has witnessed remarkable advances in health and medicine. The creation of infrastructures and measures to improve public health, as well as medical advances in the second half of the century, has increased the life expectancy of many people around the world. There have been great strides made within the medical field and there will be still more to come. Yet even as conventional medicine reaches into the cell to touch every molecule, patients are reaching out to alternatives that promise to treat them better. This is not a complete rejection of conventional medicine, but patients are sensing they can benefit from the best of both approaches (O'Mathúna, 2001).

At the dawn of the 21st Century, health promotion and complementary and alternative medicine are on the threshold of exciting new developments in health and health care. Health promotion is at a pivotal point in its history and must redefine and reposition itself in the light of an expanding public health movement. Complementary and Alternative medicine (CAM) appears to be increasingly popular with the public and to be gaining credibility within biomedical health care. As with health promotion, CAM must redefine its boundaries and establish its place within a changing and expanding health movement (Hill, 2003).

This is the case in South Africa as well. Homoeopathy has played a role in the health care of South Africans since the nineteenth century (Homeopathy in South Africa, 2006), but, it has never been included in the public health care system. However, with recent statutory recognition, and high quality educational programs producing medically literate homoeopaths (see Chapter 2), this may change in the future.

The uncertainty over exactly what constitutes 'complementary' and 'alternative' medicine hampers its progress. The problem even starts with its definition: these therapies have been described as alternative, complementary, unorthodox, unconventional, unproven, holistic, fringe, and integrative, natural or New Age medicine. In fact, the same holds true of the medicine associated with physicians and hospitals, which is variously labelled as conventional, modern, scientific,

orthodox, allopathic, reductionistic, biochemical or physicalistic medicine (O'Mathúna, 2001).

Complementary and alternative medicine, as defined by the American National Institute of Health's (NIH) National Centre for Complimentary and Alternative Medicine (NCCAM), is a group of diverse medical and health care systems, practices, and products that are not presently considered to be part of conventional medicine (NCCAM, 2002). While some scientific evidence exists regarding some CAM therapies, for most there are key questions that are yet to be answered through well-designed scientific studies - questions such as whether these therapies are safe and whether they work for the diseases or medical conditions for which they are used. The list of what is considered to be CAM changes continually, as those therapies that are proven to be safe and effective become adopted into conventional health care and as new approaches to health care emerge (NCCAM, 2002). However, examples of CAM are acupuncture, ayurveda, chiropractic, and homoeopathy (Brundin-Mather, Avinashi and Verhoef, 2005).

Conventional medicine, as defined by the NCCAM, is medicine as practiced by holders of M.D. (medical doctor) degrees and by their allied health professionals, such as physical therapists, psychologists, and registered nurses. Some conventional medical practitioners are also practitioners of CAM (NCCAM, 2002).

One major shortcoming of conventional medicine is that doctors commonly fail to concern themselves directly with the everyday personal issues that impact happiness and physical well being. Conventional medicine tends to look at parts of the person while CAM tends to focus on the person as a whole. A complete physical examination alone is insufficient. Today's medicine must also include an understanding of the person as a whole entity, functioning within a social environment (Konefal, 2002).

The medical system has become more effective for treating acute diseases. The downside of it is that chronic diseases have moved into the foreground of health care. Even if future medical interventions will be able to solve these problems, it is questionable whether our societies will be able to afford these treatments. In this situation, homoeopathy might be an attractive alternative, since it is a minimal intervention with no known and documented side effects, capitalizing on the individual organism's capacity to self-heal. Focused conventional intervention, when applied in the complex networks of living organisms, is bound to produce an array of unwanted effects. Thus, the homoeopathic strategy may also be helpful for reducing adverse effects from treatment (Walach, Jonas, Ives, Van Wijk, and Weingartner, 2005)

Patients are increasingly using complementary and alternative medicine in South Africa. The Health Products Association of South Africa found that South Africans spent over 19 billion on natural health care products in 2003. Sixty one

million of this was spent on homoeopathic medicine. This identified a 16,4% increase from 2001 to 2003 in homoeopathic sales. The homoeopathic sector accounted for 4% of the total market sales for the year. (Health Products Association of South Africa, 2005).

In 1997 a study was conducted in the United States to illustrate trends in alternative medicine use between, 1990 – 1997. This study was a follow up national survey to a study conducted in 1990 on the prevalence and costs of alternative medicine in the United States. The results reflected an increase in the use of alternative therapies. In 1990, 33,8% of respondents used alternative therapies compared to 42,1% in 1997. The therapies that increased the most included herbal medicine; massage; megavitamins; self-help groups; folk remedies; energy healing; and homoeopathy. In both surveys, alternative therapies were used most frequently for chronic problems. Extrapolation to the United States population suggests a 47,3% increase in total visits to alternative medicine practitioners, from 427 million in 1990 to 629 million in 1997, thereby exceeding total visits to all United States orthodox primary care practitioners. Alternative medicine use and expenditures increased substantially between 1990 - 1997, attributed primarily to an increase in the proportion of the population seeking alternative therapies, rather than increased visits per patient (Eisenberg, Davis, Ettner, Appel, Wilkey, Rompay, and Kessler, 1998).

A survey conducted in 2002 in Italy by Menniti-Ippolito, Gargiulo, Bologna, Forcella and Raschetti - over a period of 2 years (1997-1999) found that homoeopathy was the most frequently used alternative therapy. It was found that 8.2 % of the population was using homoeopathy and 7.7% of Italian children were being treated by it. It is interesting to note that the Italian National Health Service issue conventional medicines free of charge but homoeopathy has to be paid for by the consumer. The researchers concluded there must therefore be a derived benefit over and above the equivalent free conventional treatment.

The most rigorous UK survey of use of complementary medicine estimated that, in 1993, 33% of the population had used some form of complementary medicine and that over 10% had consulted a complementary practitioner in the previous year. Surveys of patients with chronic and difficult to manage diseases such as cancer, HIV infection, multiple sclerosis, psoriasis, and rheumatological conditions, give levels of use up to twice as high. The media often emphasise the more unusual and controversial therapies, but surveys show that most use of complementary therapy is confined to a few major disciplines. Osteopathy, chiropractic, homoeopathy, acupuncture, and herbalism are amongst the most popular in the United Kingdom. There are many myths and stereotypes about people who turn to complementary medicine, for example, that they have an alternative world view which rejects conventional medicine on principle or that they are lured by exaggerated advertising claims. The research evidence challenges such theories. Qualitative and quantitative studies show that people

who consult complementary practitioners usually have longstanding conditions for which conventional medicine has not provided a satisfactory solution, either because it is insufficiently effective or because it causes adverse effects. They have generally already consulted a conventional healthcare practitioner for the problem, and many continue to use the two systems concurrently. Some 'pick and mix' between complementary and conventional care, claiming that there are certain problems for which their general practitioner has the best approach and others for which a complementary practitioner is more appropriate (Zollman and Vickers, 1999).

There are nearly 4000 conventional healthcare professionals also practising complementary medicine in the United Kingdom; they are members of their own register (such as the British Medical Acupuncture Society for doctors and dentists). Of these, nearly half practise acupuncture, about a quarter practise reflexology and about one in seven practises homoeopathy (mainly doctors, chiropodists, and podiatrists). Many more conventional healthcare professionals, especially general practitioners, have attended basic training courses and provide limited forms of complementary medicine without official registration (Zollman and Vickers, 1999).

The demand for CAM is generated by a number of factors, which possibly include fear of conventional drugs' side effects, general dissatisfaction with existing therapies and the need for cost effective treatments, particularly in the current

situation of budget cutting and declining resources. The fact that chronic health care problems are on the rise all over the world and are not being effectively addressed by present treatments also contributes to the need for health care reform (Kayne, 1993).

Modern medicine does not claim to cure chronic disease but merely to control the symptoms, using drugs which the patient must take for the rest of their lives. Many of the medications have side effects which are uncomfortable, harmful or even fatal for the patient. Modern medicine has become enormously expensive and overly reliant on technology. Not surprisingly, both patient and practitioner are looking for an alternative (De Schepper, 2001:3).

CAM has an emphasis on a holistic approach to health and healing, referring to the importance of caring for a person's mind, body and soul. CAM criticizes what it sees as conventional medicine's view of patients as 'bags of chemicals' and highlights the importance to their healing of a person's many facets. This approach also leads to an emphasis on non-invasive 'natural' methods of healing, and stress prevention, alongside the treatment of diseases. Some of these approaches are rejected by the medical establishment, sometimes for legitimate scientific reasons, and sometimes not (O'Mathúna, 2001).

Conventional medicine has become increasingly dependent on expensive technology. In its enthusiasm for technology, it tends to neglect holism and

simple methods of intervention, such as dietary adjustments, relaxation training, which are prominent in many alternative systems of medicine and are often effective (Ornish, Scherwitz, Billing, Brown, Gould and Merrit, 1998). It is interesting to note, however, that medical ethics literature is emphasizing the importance of bedside manner, of caring for patients as whole beings. Indeed, conventional medicine is increasingly becoming more concerned with issues of diet, stress and many other factors that go beyond the physical realm. In the same way, CAM must be open to science (O'Mathúna, 2001).

A holistic approach can be gained through creating an integrated medical system, which will provide the patient with treatments that will best serve the needs and interests of the patient. The practice of integrating CAM into mainstream medicine may be a challenging task. There is the professional historical animosity to consider, the element of economic competition, and the lack of a clearly agreed upon principle on which to base the integration. It is clear that to be successful; there must be a considerable change in both professional attitudes and behaviour (Coulter, Singh, Riley, and Der-Martirosian, 2005).

The rising popularity of CAM in the West is a cause for celebration and concern. Many who embrace its philosophy see it as a response to the inadequacies of Western conventional medicine. The holistic, mind-body approach is comforting to those who view scientific rigidity and managed care as removing the person from the health care process. Critics, however, fear it as an invasion of bad

science. On one extreme, opponents see CAM as medical quackery, science run amok and a deceptive exploitation of the placebo effect. On the other, sceptics are intrigued by CAM's potential but wish to see its practices endure the same rigor of Western scientific testing. This polarization of alternative and conventional practices has created an environment where seemingly two types of medicine exist with no vision of a middle ground. But if both camps claim to offer something that the other does not, the interest of better health care would suggest some form of collaboration (Ghassemi, 2005).

There is often an unspoken division that lies between the homoeopathic and allopathic practitioner, which is fuelled by ignorance and misunderstanding between both parties. The medical students form the majority of the future health care providers in our country. It is their perceptions that will influence their patients that consult with them and they will thus affect homoeopathy indirectly. It was due to the lack of substantial evidence on the perceptions of medical students towards homoeopathy that it was essential to conduct this research. Through gaining more insight into this topic it will aid us in bridging the divide between these two professions, allopathy and homoeopathy.

This study provides a proper assessment of the awareness and perceptions regarding homoeopathy amongst individuals that will form an integral part of the medical system.

1.1 The study

Two university medical schools were selected to partake in this research, the University of KwaZulu Natal in Durban and the University of Cape Town. The University of KwaZulu Natal has a recognised homoeopathic training institution in the same city (i.e. the Durban University of Technology (D.U.T.)) whereas the University of Cape Town does not. A correlation analysis was conducted to establish if there is any difference in the understanding of homoeopathy amongst the medical students in the different cities.

Medical students in the third year of study were selected for this study. The senior medical students were not selected as they were located at various hospitals throughout their province as a part of their practical training. The third year students attend lectures at the university during the course of the year and therefore it was more practical to conduct the survey with them. There were 83 (45%) students from a class of 184 students at the University of Cape Town that participated in the study. The University of KwaZulu Natal had 197 students enrolled for their third year in 2006. Ninety eight (50%) of the 197 students completed the questionnaire. Altogether 381 questionnaires were handed out and of these only 181 (48%) questionnaires were returned completed.

Relevant permission to distribute the questionnaires at the selected universities was obtained from the respective Deans and ethics committees. The self-

administered questionnaires were explained and distributed to the medical students by the researcher, with the assistance of Class Representatives.

The questionnaire was aimed at determining the medical students understanding of and perceptions towards homoeopathy.

Responses were analysed statistically using frequency tables and Pearson's chi squares tests to ascertain any significant relationships between the factors tested. The statistical package used was SPSS version 13.

1.2 A summary of the rationale for the study:

No survey assessing perceptions of medical students in South Africa - in particular those from the University of Cape Town and the University of KwaZulu Natal - towards homoeopathy has been conducted previously.

The data collected from the questionnaires provides valuable information which could form the basis for a focused marketing drive towards increasing awareness and acceptance of homoeopathy amongst medical practitioners in general. This would improve relations and cooperation between medical practitioners and homoeopaths, and thereby improve healthcare delivery to the general public.

A study such as this may contribute to discussion on the need for CAM education in the curriculum of the two medical schools surveyed as well others in South Africa, as well as to discussions regarding the development of an integrative model of health care in South Africa.

CHAPTER 2

2 REVIEW OF RELEVANT LITERATURE

Despite the fact that for many years traditional health practices received relatively little support from national and international health organisations, they have survived, and their presence and influence on health care systems have been recognized. As part of its global “Strategy for Health for All in the 21st Century”, The World Health Organisation (WHO) has supported the integration of conventional and alternative medicine to improve the quality of health care (World Health Organisation, 1998).

2.1 The history, laws and principles of homoeopathy

Dr. Samuel Hahnemann, a German physician, was the founder of homoeopathy. Hahnemann is the only person in history to have envisioned an entire system of medicine and then fully developed it into a powerful and practical tool within the span of a single lifetime. Hahnemann formulated the laws and principles upon which homoeopathy is based. The foundation of homoeopathy is “like cures like” i.e. the principle that a substance which produces certain symptoms in healthy people when given in large doses can cure the same symptom in the sick when given in small doses. One of the fundamental principles of homoeopathy is that homoeopaths do not treat a disease; but rather treat a patient with a disease. An

aspect of homoeopathy which makes it satisfying to the practitioner is that the patient is addressed as a whole person, and not just an organ or a part. Homoeopaths can treat patients of all ages and both genders, suffering from almost any ailment (De Schepper, 2001:xiii-43).

The history of homoeopathy has not been a smooth journey. Soon after its discovery, homoeopathy spread rapidly across Europe and to other countries, especially the United States. Its rise was partly attributed to the barbaric practices in orthodox medicine of the time, such as bloodletting, high-dose cathartics, and heavy metals. By the turn of the century, 8% of all medical practitioners in the United States were homoeopaths and there were 20 homoeopathic medical colleges, including Boston University School of Medicine, New York Medical College, and Hahnemann Medical College. Allopathic medicine's reaction to homoeopathy was consistent and harsh. The American Medical Association (AMA) was formed a year after the American Institute of Homeopathy, partly to combat such "irregulars". Foreshadowing contemporary debates, homoeopaths responded with statistics and helped pioneer comparative quantitative information and large-scale comparative trials. For example, during the cholera epidemic of 1854, homoeopathic hospitals had dramatically lower mortality rates than allopathic institutions. Orthodox physicians criticized the quality of the data and questioned the reliability of any "complex" mathematical method that portrayed homoeopathy favourably (Jonas, Kaptchuk, and Linde, 2004).

Homoeopathy was a prominent component of 19th-century health care and recently has undergone a revival in the United States and around the world. The new revival of homoeopathy started in the 1960s and 1970s. The number of patients using homoeopathy in the United States of America is estimated to have increased 500% in the last 7 years, most involving self-treatment with over-the-counter remedies. Evidence on the effectiveness of homoeopathy for specific clinical conditions is limited and is generally poorer quality than research done in allopathic medicine. More and better research is needed, unobstructed by belief or disbelief in the system. Until homoeopathy is better understood, it is important that physicians be open-minded about homoeopathy's possible value and attempt to maintain communication with patients who use it (Jonas, Kaptchuk, and Linde, 2004).

2.2 Homoeopathic training and professional status in South Africa

Homoeopathic registration in South Africa allows practitioners privileges and rights similar to those of medical practitioners. Homoeopathic practitioners are recognised as primary contact professionals, with the same status as allopathic practitioners. The main route to qualification and registration involves a five-year full-time course leading to the degree Master of Technology (Homoeopathy) (M. Tech. (Hom)). Graduates of this programme are required to register with the appropriate statutory body, namely, the Allied Health Professions Council of South Africa (AHPCSA). This body was established in terms of the Allied Health

Professions Act, 1982 (Act 63 of 1982) (Homoeopathic Association of South Africa, 2007). This body has equivalent legal status to the body which medical graduates register with, namely, the Health Professions Council of South Africa (HPCSA). According to the law, an internship of one year is a requirement for registration with the AHPCSA, but this has not yet been organised, so has not yet been implemented. From August 2005 it became compulsory for homoeopaths who dispense their own medication to obtain a Compounding and Dispensing Certificate issued by the Pharmacy Council of South Africa, and then obtain the relevant licence from the Department of Health (www.hsa.org.za, 2007).

The M. Tech. (Hom) degree is offered at the Durban University of Technology and the University of Johannesburg. The degree extends over five years of which the first three provide a thorough grounding in traditional medical subjects with special emphasis on diagnostic skills. These subjects include Biology I, Pharmacology I, Anatomy I and II, Physiology I and II, Pathology I and II, Diagnostics I and II. In the final two years, emphasis is placed on the practical application of homoeopathic, herbal and naturopathic principles, including aspects such as preventative medicine, community health care, nutrition, physical exercise and related therapies. Subjects include Auxiliary Therapy I, Materia Medica I, II and III, Clinical Homoeopathy I and II, and Homoeopharmaceutics I. The student is guided to consider the patient as a whole and relate all peculiarities, reactions and modalities to the homoeopathic method of treatment (Department of Homoeopathy, D.U.T., 2006).

Medical practitioners registered with the HPCSA may obtain training and registration in homoeopathy via the South African Faculty of Homeopathy. The Faculty offers a three-year part-time Postgraduate Diploma Course in homoeopathy for medical doctors comprising 25 three-day weekend modules of 20 hours each, providing 500 hours of direct tuition. The Faculty course is accredited by the British Faculty of Homeopathy and by the AHPCSA. On successful completion of the course, graduates are awarded the diplomas of the SA Faculty of Homeopathy (DFHom.SA) and the British Faculty (MFHom. UK) and are eligible for registration as homoeopaths with AHPCSA (The South African Faculty of Homeopathy, 2007).

There is a third route to qualification and registration, which is where qualifications have been obtained elsewhere which the AHPCSA deems to be equivalent as per the South African Qualifications Standards Authority. Such practitioners may be required to pass equivalency exams arranged by the AHPCSA before they will be permitted to register (www.hsa.org.za, 2007, Department of Health, 2000).

In terms of the Allied Health Professions Act 1982 (Act 63 of 1982) any person wishing to prescribe homoeopathic medicine or practice homoeopathy in South Africa must be registered as a homoeopathic practitioner with the Allied Health Professions Council of South Africa. This includes medical practitioners and it is

for this reason that dual registration is allowed for medical practitioners with both the HPCSA and the AHPCSA (www.hsa.org.za, 2007).

2.3 Models of health

2.3.1 The medical model

The dominant medical model of Western culture, the biomedical model, is based on three underlying assumptions and principles: (1) objectivism, the idea that accurate knowledge can be exclusively achieved through an impersonal assessment of sensory based information; (2) determinism, the idea that causation is exclusively characterized by an upward and linear mechanistic linkage; and (3) positivism, the idea that knowledge exclusively accumulates through the accretion of data from the positive results of sensory based experimentation. This model has served us well, but with the progressive urbanization of life accompanied by the industrial and technologic revolutions humankind has seen the development of new and very different adversities, which have resulted in the emergence of a uniquely new category of modern day ailments, particularly stress related diseases, acute and chronic that are directly linked to personal attitudes and lifestyle. As a result, the limitation of a medical model that cannot effectively incorporate psychological, psychosocial or spiritual factors has become increasingly evident (Dacher, 1996).

The current medical paradigm is a branch of natural science, and thus a biological theory of disease. It sees disease in terms of anatomy and physiology. Disease is regarded as a biological dysfunction, a fault in the human biological system. This led to the simplification that health and disease can easily be defined and distinguished from each other. This paradigm is the predominant framework at present, and because the paradigm has made advances in areas such as infectious diseases and surgery there is an inability to look outside this paradigm (Wulff, Pedersen and Rosenberg, 1990).

There are clear limits to the medical model's sphere of influence. If the medical model is to exert an influence beyond these limits then its way forward or 'integration' must involve acceptance of other spheres of human experience, and their associated 'methods' and 'evidence bases'. The objective is not to remove the medical model but to harness its legitimate role in an integral understanding of illness. An integrated approach has the potential to provide people with more choice, thereby empowering them through self-management and self-help initiatives (McCulloch, Ryrie, Williamson, and St John, 2005).

2.3.2 The CAM model

CAM emphasises an holistic approach to health and healing, referring to the importance of caring for a person's mind, body and soul. CAM criticizes what it sees as conventional medicine's view of patients as 'bags of chemicals' and highlights the importance of their healing of a person's many facets. This approach also leads to an emphasis on non-invasive 'natural' methods of healing and stress prevention, alongside the treatment of disease (O'Mathúna, 2001).

Another term for complementary medicine is holistic medicine and Zollman and Vickers (1999) state that this epitomises many, but not all complementary practitioners, in that they have a multifactoral and multilevel view of illness. Disease is thought to result from disturbances at a combination of physical, psychological, social, and spiritual levels. The body's capacity for self repair, given the appropriate conditions, is emphasised.

The CAM approach to health fits well within the World Health Organisation definition of health which is that health is "a state of complete physical, mental and social well being, and not merely the absence of disease or infirmity" (World Health Organisation, 2007).

In holistic models, mental, physical, social, and spiritual components of health are not seen as distinct from one another but rather as understandable only in light of

the individual's wholeness. Practitioners influenced by the holistic model might focus on balance and the unique constellation of elements and interactions affecting each individual. Even in light of their advantages related to encouraging health promotion, prevention, and patient involvement in care, the holistic models have been criticized as being so broad, diverse, and multifactorial that they are difficult to apply to concrete tasks such as formulating licensure requirements, practice guidelines, and health care benefits packages (Klimenko, Julliard, Lu, and Song, 2006).

2.3.3 The need for an integrated model

Though different models tap into different aspects of the human condition, practitioners need to view them as complementary rather than conflicting (McCulloch, Ryrie, Williamson, and St John, 2005). Integrative medicine, as defined by NCCAM, combines mainstream medical therapies and CAM therapies for which there is some high-quality scientific evidence of safety and effectiveness (NCCAM, 2002).

The various models of health have been discussed in literature as being distinct and often mutually contradictory, particularly with respect to whether definitions of health are value laden or value free. This implies that most health care practitioners each think of health only in terms of a single model. For instance, while most physicians are thought to adhere to the biomedical model and thus

define health as the absence of disease, perhaps the way health care practitioners define health is more fluid than expected and actually combines aspects of a variety of models (Klimenko, Julliard, Lu, and Song, 2006).

A holistic approach can be gained through creating an integrated medical system, which will provide the patient with treatments that will best serve the needs and interests of the patient. The practice of integrating CAM into mainstream medicine may be a challenging task. There is the professional historical animosity to consider, the element of economic competition, and the lack of a clearly agreed upon principle on which to base the integration. It is clear that to be successful there must be a considerable change in both professional attitudes and behaviour (Coulter, Singh, Riley, and Der-Martirosian, 2005).

2.4 Knowledge, perceptions and practice of complementary medicine

Historically, conventional health care providers have received limited or no formal education in CAM and have been perceived by patients as being biased against CAM. Thus, many consumers do not seek advice about use of CAM therapies from physicians, nurses, and pharmacists, nor do they discuss their use of CAM therapies with their primary care providers (Kreitzer, Mitten, Harris, and Shandeling, 2002).

Individuals commonly report wanting to talk to their physicians about the use of CAM, but they tend not to do so. Reasons for this lack of communication include: physicians not asking patients about CAM use, as well as patient perceptions that (a) their physician will not approve of their CAM use, (b) their CAM use is not relevant information for their physician, and (c) their physician lacks knowledge about CAM (Brundin-Mather, Avinashi, and Verhoef, 2005). It is important for all practitioners, conventional and non-conventional, to be aware of these issues that exist and try to work together to form a more holistic approach that will benefit the patient.

Patients report that they do not tell their allopathic physicians what they are using CAM because of experienced or expected disapproval. This prevents many physicians and patients from communicating potentially useful information (Konefal, 2002).

Eisenberg, Kessler, Van Rompay, Kaptchuk, Wilkey, Appel, and Davis (2001) conducted a national survey in the United States of America on the perceptions of complementary therapies relative to conventional therapies among adults who use both. Of the respondents who saw both a medical doctor and used CAM therapies it was found that 79% perceived the combination to be superior to either one of the treatments in isolation. The respondents who saw both a medical doctor and a CAM provider typically saw a medical doctor before or concurrent with their visits to a CAM provider and only a small percentage saw a

CAM provider before seeing a medical doctor. Perceived confidence in CAM providers was not substantially different from confidence in medical doctors. Among the 831 respondents who in the past year had used a CAM therapy and seen a medical doctor, 63% to 72% did not disclose at least one type of CAM therapy to the medical doctor. The common reasons for nondisclosure were “It wasn’t important for the doctor to know”; “The doctor never asked”; “It was none of the doctor’s business”; and “The doctor would not understand”. There were a few respondents who thought their doctor would disapprove of or discourage CAM use, and thought their doctor might not continue as their provider. Respondents judged CAM therapies to be more helpful than conventional care for the treatment of headache and neck and back conditions but considered conventional care to be more helpful than CAM therapy for treatment of hypertension.

This study conducted by Eisenberg *et al.* (2001) identified that the internet was the chief source of CAM information (81,3%), followed by journals (40,8%), books (37,5%), health databases (28,3%) and videos (2,6%). The majority of patients seeking CAM therapies were described as being more educated, reporting poorer health, and selecting CAM therapies not because of dissatisfaction with conventional therapies, but because alternative therapies were more congruent with their values and health beliefs.

A survey was conducted in the United Arab Emirates to explore the attitudes and practices of general practitioner and medical students with regards to the forms of therapy not generally accepted by conventional medicine, including herbal medicine, acupuncture, homoeopathy, spiritual therapy, and osteopath/chiropractic (Hasen, Das, and Behjat, 2000). The results showed widespread use of alternative medicine among students, general practitioners, and their friends and relatives. In spite of extensive use, many students and general practitioners were unsure of the effectiveness of alternative medicine. However, more general practitioners than students considered herbal medicine, acupuncture and homoeopathy to be effective. The results of this study indicate that alternative medicine has an enormous hidden presence and influence within the health care system of the United Arab Emirates. Although the general practitioners knowledge about various forms of alternative medicine was limited, they did not dismiss such practices as mere quackery. The fact that a fairly large number of the general practitioners even suggested patients approach practitioners of alternative medicine shows that general practitioners not only acknowledge the existence of unconventional therapies, but also support them, even if they are viewed as a last resort.

Several studies (Kreitzer, Mitten, Harris, and Shandeling, 2002., Rampes, Sharples, Maragh, and Fisher, 1997., and Winslow and Shapiro, 2002.) show that knowledge about CAM is lacking amongst practicing physicians. However, these studies also show that physicians are interested in learning more about

CAM, including wanting more attention paid in undergraduate, graduate, and continuing education courses. Moreover, the public's demand for CAM has spurred some physicians to make referrals to complementary and alternative practitioners, to provide these services, and to take the initiative to become educated regarding the safety, efficacy and assumptions of CAM approaches (Brundin-Mather, Avinashi, and Verhoef, 2005).

In this regard, the title of the article written by Winslow and Shapiro arising from their 2002 study is revealing; "Physicians want education about complementary and alternative medicine to enhance communication with their patients". In their study, a total sample of 751 physicians in the Denver, Colorado area were asked about their experience with CAM and communication about CAM with patients. It was found most physicians (60%) wanted to learn more about CAM. Female physicians were more interested than male physicians. The physicians who felt very positive or somewhat positive about CAM therapies were more interested in education and learning how to advise patients, yet there was no correlation between interest in education and comfort level discussing CAM with patients. It was found several factors were significantly associated with physicians recommending use of CAM: female sex of physician, physician self-use of CAM, physician self-reported education in CAM, and physician self-reported belief in CAM efficacy. This data provides information on characteristics of physicians who advise patients to seek CAM and the specific modalities recommended. The study also demonstrates a desire by most physicians to learn more about CAM.

The study showed several reasons for physicians' desire for CAM education. The most powerful reason was the desire to dissuade patients from undergoing an unsafe or ineffective modality. Other frequently cited reasons were the desire to recommend a safe and effective CAM modality, the desire to receive factual information about CAM modalities, and the desire to be able to respond to patient queries (Winslow, and Shapiro, 2002).

The greatest number of orthodox health professionals who specialise in homoeopathy are medical doctors. In Europe where homoeopathy is one of the leading alternative medicines, it has been estimated that over 30% of French physicians and 20% of German physicians prescribe homoeopathic medicines. In Britain 40% of physicians refer patients to homoeopathic doctors (Ullman, 1997).

There are nearly 4000 conventional healthcare professionals also practising complementary medicine in the United Kingdom; they are members of their own register (such as the British Medical Acupuncture Society for doctors and dentists). Of these, nearly half practise acupuncture, about a quarter practise reflexology and about one in seven practises homoeopathy (mainly doctors, chiropodists, and podiatrists). Many more conventional healthcare professionals, especially general practitioners, have attended basic training courses and provide limited forms of complementary medicine without official registration (Zollman and Vickers, 1999).

In the United Kingdom, homoeopathy is one of the most established complementary and alternative medicines in that it has been incorporated into the National Health Service (NHS) since its inception. Five NHS homoeopathic hospitals now exist as well as a Faculty of Homoeopathy established by an act of parliament (Owen, Lewith, and Stephens, 2001).

In Japan, more physicians are now attracted to CAM research, because they envisage that they will learn new medical methods, which have high practicality as well as high cost performance and safety. Furthermore, from the viewpoint of basic medicine, CAM offers unexpected opportunities to discover new substances and new mechanisms (Suzuki, 2004).

Doctors give a variety of reasons for undertaking courses in complementary and alternative medicine, from feeling a responsibility to respond to their patients' interests and needs to develop "another string to their bow." Some are attracted to its study in its own right, others by a wish to focus some of their energy away from conventional medical practice, which they may find stressful and unfulfilling. Doctors studying complementary and alternative medicine often call on different personality traits and report a variety of positive benefits from training, including welcoming the opportunity to engage their feelings, trust their intuition, and enjoy therapeutic touch (Owen, Lewith, and Stephens, 2001).

2.5 CAM education in medical schools

In medical schools worldwide there is still limited training on complementary and alternative medicine. It is therefore possible to suggest that perhaps the scepticism amongst the medical students could be due to their lack of knowledge. In a study conducted in Canada amongst students in health care professions it was found that the student group with the highest reported knowledge about a given therapy generally gave that therapy the highest usefulness rating (Baugniet, Boon, and Østbye, 2000).

Within the last five years there has been an increase in CAM curriculum development in medical schools across Great Britain, the European Union, the United States and Canada. Such curriculum changes are partially based on the belief that doctors must have an understanding of all the health services their patients may be accessing, particularly in order to appropriately assess and respond to potential interactions between various health treatments (Brundin-Mather, Avinashi, and Verhoef, 2005).

Until recently few medical students would have been familiar with complementary and alternative medicine, despite being interested in it. Over the past few years there has been a major increase in courses familiarising students with complementary and alternative medicine. The opportunity to integrate this training into the undergraduate curriculum has been facilitated by giving students

options in special study modules and noting what they want to learn. At the University of Southampton the module in complementary and alternative medicine has been running for five years as part of the special study modules for medical students in their third year. It grew out of the students' request for familiarisation with this type of medicine (mirroring the demand for such therapy by patients) (Owen, Lewith, and Stephens, 2001).

Medical schools are increasingly introducing teaching about complementary and alternative medicine (CAM) in the curriculum. The debate about whether CAM should be taught at all has therefore now given place to discussions about the appropriate format, content and timing of these courses. At present there is immense variability between the courses offered by different medical schools. Teaching time tends to be limited and is often offered as special study modules and electives which students have to positively choose, rather than as core teaching within the undergraduate curriculum. General opinion surveys show that, in general, CAM is an area which interests medical students and which they may sometimes actively support (Greenfield, Brown, Dawlatly, Reynolds, Roberts, and Dawlatly, 2006).

In a study on CAM use and attitudes amongst medical students in the USA it was found that the number of US medical schools report the inclusion of CAM in their curricula has increased from 46 out of 125 schools in 1996-1997 to 75 schools in 1998-1999 with most US schools now addressing CAM curricula. While CAM in

the educational setting was originally defined as 'unconventional treatment modalities not addressed by allopathic medical schools', more contemporary definitions of CAM and integrative medicine have centred around a holistic approach to health care taking into account alternative healing systems, beliefs and individual modalities of treatment not usually offered in a traditional Western health care system (Lie and Broker, 2004).

Saxon, Tunnicliff, Brokaw, and Raess (2004) report that in the United States of America most allopathic medical schools offer instruction in CAM. Their study found that CAM material was usually presented in required courses sponsored by clinical departments. It was most likely taught in the first 2 years of medical school, and involved fewer than 20 contact hours of instruction. The topics most often taught were acupuncture (68%), herbs and botanicals (68%), spirituality (56%), dietary therapy (52%), and homoeopathy (48%). A large number (72%) of CAM instructors were also practitioners of CAM modes of therapy. Only a small number (12%) of the instructors taught CAM from an evidence-based perspective.

There was a study conducted in Brazil (Teixeira, Lin and Martins, 2005) with undergraduate medical students (from all six years of the undergraduate medical course) and their attitudes towards homoeopathy and acupuncture being included into their curriculum as an optional discipline at the University São Paulo. The study was in the form of a self administered questionnaire on these

therapies. In total 512 students participated, 484 students filled their questionnaires correctly. It was found that over 85% of the students considered that homoeopathy and acupuncture should be included in the curriculum, 56% of the students showed great interest in learning about these therapies. Although 76% had little or no knowledge, 67% believed that these therapies had some effectiveness, and that chronic disease (37%) or even chronic and acute diseases (29%) would be the main indicators for their use. Around 35% were receptive towards offering public primary care using both therapies, while 34% thought these treatments should also be available in hospitals and 60% believed they could be integrated with conventional medical practices.

In order to incorporate CAM teaching within medical school programmes, many logistical challenges need to be overcome, including establishing (i) administration approval, (ii) time in the curriculum, (iii) valid teaching resources and (iv) knowledgeable instructors. However, these barriers are not insurmountable. It is essential that medical school faculties trying to incorporate CAM education into their curriculum look closely at the pedagogical philosophy and course content as well as the evidence base on specific CAM systems to see how they can best be integrated (Verhoef, 2005).

The effective teaching of CAM methods goes far beyond merely the mastery of technical information and skills. Physicians need to understand why patients seek out CAM. The curriculum must include patient motivation and explore the

doctor – patient relationship, including the beliefs, attitudes, and stereotypes of both doctor and patient. Communication skills must be developed that allow the physician not merely to listen to patients, even when he or she believes what the patient is doing with respect to CAM does not reflect evidence-based medicine, but also to actively inquire about the possible applications of CAM (Konefal, 2002).

Medical schools have an important role in reducing the isolation of their students from CAM health beliefs, practices, and systems of health care that is common in many communities. This can be accomplished by integrating knowledge of, information about, and exposure to CAM into the medical school curriculum through lectures, multimedia presentations, hands-on experiences, and observation of CAM practitioners. Discussions need to include scientific efficacy, legal and ethical considerations, and the role of spirituality in health and healing. Additional attention needs to include recognition of the limitation of science-based approaches and the reason why CAM is popular with patients and some allopathic physicians (Konefal, 2002).

2.6 Curriculum at the University of Cape Town and the University of KwaZulu Natal

The Nelson R. Mandela School of medicine at the University of KwaZulu-Natal presently offers a 5-year course leading to the degrees of Bachelor of Medicine

and Bachelor of Surgery (MChB). This is then followed by 2 years internship and 1 year community service. The two degrees are taken concurrently. The course is composed of modules, which in the first three years are made up of themes. The course is designed in a spiral manner. This means that the content covered in the early years is revisited in various ways in later years of study, but in increasing depth. During each year, specific periods of enrichment (periods for special interests or needs) are built into each module (Nelson R Mandela School of Medicine Handbook, 2006). There is no specific module on homoeopathy or alternative medicine incorporated into the course. However, the 4th year students organize a one day conference every year dealing with CAM (MacTaggot, 2006).

The MChB course offered at the University of Cape Town comprises of 6 years of study followed by 2 years internship and 1 year community service. The course includes the modules Introduction to Integrated Health Sciences: Part 1 and 2 and Fundamentals of Integrated Health Sciences Part 1 and 2. These modules introduce students to the “whole person via the bio-psycho-social model”. Problem-based learning [PBL] is the central learning activity of this course (<http://www.health.uct.ac.za/>, 2007). There is no specific module on homoeopathy or alternative medicine incorporated into the course (Klingenberg, 2006).

2.7 Perception surveys

2.7.1 The role of surveys

A survey is a method of collecting information from people about their ideas, feelings, plans, beliefs, and their social, educational, and financial background. It usually takes place in the form of questionnaires and interviews. It is used to help policymakers, program planners, evaluators, and researchers, surveys are most appropriate when information comes directly from people (Fink, 1985). The data they provide are descriptions of attitudes, values, habits and background characteristics (Fink and Kosecoff, 1985).

2.7.2 Perception surveys of CAM

Despite an increase in use of alternative healing systems there still exists a lack of understanding of these therapies. Surveys indicate that doctors and medical students are increasingly interested in complementary and alternative therapy, yet lack of knowledge is one of the greatest barriers to its appropriate use (Berman, 2001).

A study conducted in Toronto, Canada (Baugniet, Boon, and Østbyte, 2000) compared the views towards complementary and alternative medicine of final year medical students with final year students in other health care professions

such as pharmacy, nursing, physiotherapy, and occupational therapy. There were 437 respondents and 411 of these (94%) believed that patient demand for CAM is increasing. In this study, homoeopathy was one of the less widely accepted therapies. The study showed that the top four practitioners consulted by students were massage therapist, chiropractors, herbal medicine practitioners, and acupuncturists and that the knowledge ratings were the highest for these therapies that are considered most mainstream. The knowledge ratings were the lowest for the less widely accepted therapies (homoeopathy, faith healing and reflexology). The pharmacy students reported significantly more knowledge of both herbal medicine and homoeopathy than all other students. When it came to the medical students, they rated all therapies less useful than all other students. The student group with the highest reported knowledge about a given therapy generally gave that therapy the highest usefulness rating. The medical students uniformly claimed less educational exposure to CAM than did other students. Pharmacy students (99%) were more likely than all other students to think that CAM should be taught as a separate course in their curriculum. More than two thirds of students in all programs were interested in receiving training to practice a form of CAM, with the exception of medical students, who expressed the lowest interest in such training (42,6%) (Baugniet, Boon, and Østbyte, 2000).

Another study conducted in Canada investigated Canadian medical student's attitudes, beliefs about CAM as well as opinions of CAM education in undergraduate medical education. This occurred as part of a national initiative to

develop curricula on CAM for undergraduate medical education programs. An anonymous questionnaire was distributed to all first and second year medical students in Canada in order to assess their comfort with, beliefs about, and exposure to CAM. There were approximately 3500 first and second year medical students attending Canada's 16 medical schools at the time the survey was conducted. All 16 medical schools agreed to participate in the survey. The mean response rate was 44%, though the response rate varied across the schools. Of the 1641 students who responded, 716 were first year students and 925 were second year students. There were no statistically significant differences between first and second year student responses to survey questions. First and second year medical students estimated on average that 44% of the Canadian population use CAM, and that 52% of patients do not tell their physicians that they use CAM. In this survey it was found that 75% of all these medical students agreed or strongly agreed that patients should first see a medical doctor before undergoing CAM treatments and 92% felt that medical licensing boards should have written policies addressing physician practise of CAM and/or physician referral to CAM practitioners. Eighty-seven percent of these students agreed or strongly agreed that there is a need for increased CAM curricula in undergraduate medical education (Brundin-Mather, Boon, and Østbyte, 2000). This questionnaire was the first national survey of Canadian medical student's attitudes, beliefs about CAM as well as opinions of CAM education in undergraduate medical education. There was clear willingness on the part of first and second year medical students to discuss CAM with their patients. However,

whether this positive attitude remains throughout medical school and residency could not be answered in this study (Brundin-Mather, Boon, and Østbye, 2000).

In a survey conducted in Birmingham, England with first year medical students it was found that aromatherapy and homoeopathy were the two most commonly used therapies amongst the students (Greenfield, Innes, Allan, and Wearn, 2002).

Although studies indicate a high degree of interest in alternative medicine among both physicians and residents, the attitude of medical students' have not been adequately explored (Hasen, Das, and Behjat, 2000). This is one of the reasons the current study has been undertaken.

2.7.3 South Africa

Singh, Raidoo, and Harries (2004) conducted a survey in Chatsworth, South Africa on the prevalence, patterns of usage and people's attitudes towards complementary and alternative medicine (CAM) among the Indian community. The percentage of people using CAM among the Indian community of Chatsworth (39%) is comparable to that reported elsewhere in the world: 40% in the USA and 49% in Australia. It was surprising to note that although CAM practitioners' services and products are extensively advertised in Chatsworth, almost a quarter of the respondents had no prior knowledge or understanding of

CAM. This was also the main reason given for preferring to use allopathic medicine (Singh, Raidoo, and Harries, 2004). In this study, the major reason given for CAM usage, cited by 38% of CAM users, was that though modern medicine brought some improvement in conditions it failed to cure the underlying problem.

Surveys undertaken in South Africa on perception of pharmacists of complementary medicine (Daphne, 1997) and of veterinarians of homoeopathy and acupuncture (Wortmann, 1997), indicated a positive attitude toward these therapies from the professionals surveyed. Pharmacists surveyed indicated that very few had received instruction in complementary therapies, but that more had been exposed to homoeopathy than any other therapy. Veterinarians surveyed felt the need for clinical trials and proof of efficacy of therapies to adopt these in their practices, but that the majority wished to learn more about the therapies and saw a future for the incorporation of these in their practice.

Recently, a study was conducted by Turner (2005) on the perceptions of veterinary surgeons practicing in Kwazulu-Natal. This study showed that the level of interest in homoeopathy amongst veterinarians has increased, 60,3% of veterinarians used homoeopathy compared with 26% in 1997 (Wortmann); with more veterinarians using homoeopathy than before, even if they do not have a very sound understanding of the theory. Furthermore, 79% think that homoeopathy has a role to play in veterinary medicine compared with 76% in

Wortmann's study. Wortmann found that 56% of veterinarians were interested in receiving further education in homoeopathy, whereas 20% that had no interest to learn more. The remaining 24% felt that they might be interested in learning more about homoeopathy. Turner noted that veterinarians seem to be using homoeopathy within the allopathic paradigm, rather than embracing a new approach to health and disease. This would obviously limit their application of homoeopathy, as well as their success.

Maharajh conducted a study in 2005 on general practitioners and pharmacists in the Greater Durban region, and their general knowledge of homoeopathy, perception of homoeopathy as a therapy, and their views on communication with homoeopaths. A large proportion of the general practitioners and pharmacists knew little or nothing concerning the recognition of homoeopathy as a therapy, despite the growing popularity of homoeopathy around the world and in South Africa. It was found that there are numerous misconceptions regarding homoeopathic training in this country. Pharmacists and general practitioners also doubted the skill of homoeopaths as therapists. The study revealed that there is little or no communication between homoeopaths and general practitioners/pharmacists, despite acknowledgement that communication would be beneficial for patients. Referrals between homoeopaths and general practitioners/pharmacists were found to be almost non-existent. However, it was discovered that a willingness to communicate and co-operate does exist amongst practitioners in this study.

In 2004 Small conducted a study amongst Grade 12 learners at selected schools in the North Durban and Durban South regions within the jurisdiction of the KwaZulu-Natal Department of Education and Culture, to assess their knowledge and perceptions of homoeopathy. The Grade 12 learners were identified as early stage health consumers and future medical practitioners of the area. The results reflected that the learners had a lack of awareness of homoeopathy and in fact the majority of the respondents (76%) had never heard of homoeopathy and were therefore not able to provide any opinions on it. Of the respondents only 5,9% were aware of a registered homoeopath in the area, and 7,4% were aware of family members being treated homoeopathically and a mere 3,7% of respondents been treated by a homoeopath. It was found that despite this lack of awareness, a great majority of respondents (over 80%) wished to learn more about homoeopathy. More than a third of respondents (36%) had considered a career in medicine, with the exact same proportion indicating that they would consider a career in homoeopathy. The research indicated the dire need for more information on homoeopathy and the necessity to bring homoeopathy to the people.

2.8 The future of health care and CAM

The future needs to include improved training for medical and complementary students, and health clinics and institutions which incorporate CAM and conventional methods of treatment.

The fact that chronic health care problems are on the rise all over the world and are not being effectively addressed by present treatments contributes to the need for health care reform (Richardson, 1996).

From the patient's point of view, having specially trained doctors may be of great value in integrating complementary and alternative medicine and conventional medicine while making the training in complementary and alternative medicine yet more professional. An opportunity exists for doctors to incorporate different approaches that can balance their own personal values and help in developing their individual model of health (Owen, Lewith, and Stephens. 2001).

The model of homoeopathic training and registration in South Africa is significant, considering its combination of sound medical and homoeopathic education, followed by statutory recognition on a par with general medical practitioners. However, the practice of homoeopathy in South Africa has not yet been incorporated formally into the public health sector.

The model of medical education represented by the University of Southampton School of Medicine which has established a Complementary Medicine Research Unit, within the Department of Primary Care. At the University of Southampton all medical students are offered a 1-hour lecture in first year, a half-day presentation in their second year, and a third-year special study unit over 10 half-days. The key features of this special study unit are that it uses learning

objectives set by students and CAM lecturers; revisits basic assumptions about becoming a doctor (e.g., what is health?); uses a reflective learning process; reviews the evidence base for CAM; employs a teaching team of local CAM practitioners (including medical practitioners, nurses and chiropractors); and includes clinical visits as well as seminars (Owen, Lewith, and Stephens, 2001).

Lewisham Hospital, London, England has successfully integrated natural medicine into the public health service. An outpatient service has been set up offering acupuncture, homoeopathy and osteopathy (Richardson, 1996).

The Glasgow Homoeopathic Hospital in Scotland serves as a primary health care centre and also has academic departments for training of homoeopaths. Surveys conducted by the academic departments of Glasgow Homoeopathic Hospital have shown that 20% of all Scottish family doctors have attended at least one part of the postgraduate courses in homoeopathy run in Glasgow. The Glasgow courses are, in fact, the most popular courses in postgraduate medical education, in any discipline, in the whole of the UK (Leckridge, 1997).

It should be considered that the integration of complementary and alternative medicine gives doctors and the health profession an opportunity to bring together the strengths and to balance the weaknesses inherent in different systems of health care, representing a coming together of the heart, head, and hand (Owen, Lewith, and Stephens, 2001).

CHAPTER 3

3 METHOD

3.1 Objective

The aim of this survey was to determine the perceptions of third year medical students towards homoeopathy, by means of a perception questionnaire.

3.2 The participants

The population consisted of medical students at the University of Cape Town and the University of KwaZulu Natal. The sample consisted of third year medical students at these two universities.

3.2.1 Inclusion criteria

- Third year undergraduate medical students at the University of Cape Town and the University of KwaZulu Natal in 2006.
- Current fulltime enrolment at either the University of Cape Town or the University of KwaZulu Natal.
- Fluency in English.

3.2.2 Exclusion criteria

- Any medical student registered for any year other than their third year.

3.2.3 The sample

The third year medical student class at the University of KwaZulu Natal comprised 197 students. This is the number of questionnaires distributed to that class. The number of questionnaires returned was 98 (50%). All questionnaires were completed correctly so none were rejected. Thus, data was collected from 98 questionnaires (100%).

The third year medical student class at the University of Cape Town comprised 184 students. This is the number of questionnaires distributed to that class. The number of questionnaires returned was 83 (45%). All questionnaires were completed correctly so none were rejected. Thus, data was collected from 83 questionnaires (100%).

The total number of third year medical students in both universities was 381. The total number of questionnaires returned was 181 (48%). All questionnaires were completed correctly so none were rejected.

Thus, the total number of participants in this study was 181 (a return of 48%), hereafter referred to as the sample.

3.3 Methodology

The research took the form of a self-administered, descriptive, quantitative survey. A survey is a method of collecting information from people about their ideas, feelings, plans, beliefs, and their social, educational, and financial background. It usually takes place in the form of questionnaires and interviews. It is used to help policymakers, program planners, evaluators, and researchers, surveys are most appropriate when information comes directly from people (Fink, 1985). The data they provide are descriptions of attitudes, values, habits and background characteristics (Fink and Kosecoff, 1985).

3.3.1 The questionnaire

The questionnaire (See Appendix E) comprised 37 questions, in 4 sections. The questions were closed questions. A qualitative element was included at the end of the questionnaire where the medical students could add in any comments related to specific questions or to the questionnaire in general. Questions were phrased to elicit a response from the medical students in relations to their perceptions and knowledge regarding homoeopathy.

The questionnaire was adapted from Maharajh (2005) and Small (2004).

The questionnaire needed to fulfil the following criteria:

- The questions asked needed to be asked at the correct level of understanding and not contain homoeopathic jargon;
- The language and lay-out needed to be user friendly and understandable;
- The questions needed to be logical and meaningful and illicit the desired information;
- The questions needed to be relevant to the subject of research.

Factors that affected completion of the questionnaire:

- Length of the questionnaire;
- Time taken to complete the questionnaire;
- Available student time to complete the questionnaire (Scheuren, 2004).

In order to evaluate the above criteria, after the construction of the questionnaire it was administered to a focus group. A focus group is a tryout of the questionnaire on a sample of people to reveal if instructions are understood and questions can be answered. This process improves the response rate as well as the reliability and usefulness of the questionnaire (Fink and Kosecoff, 1985).

The focus group consisted of 7 people, the majority of whom were medical students as the questionnaire was to be targeted at this group of students. This group gathered to discuss the questionnaire, the factors that it covered, and to establish the reliability of the questionnaire as well as to rule out ambiguity and

syntax difficulties. The results were then assessed and alterations were made according to any problem that had arisen. Relevant questions were added while some irrelevant questions were omitted.

3.3.2 Administration of the questionnaire

After obtaining permission, and making the relevant arrangements, the researcher went to the respective universities to distribute the questionnaires. The questionnaires were introduced to the medical students and it was explained that the responses were voluntary and confidential.

The following documents relevant to the survey are included in the appendices: a letter to the participants introducing the survey (Appendix C); instructions on how to complete the questionnaire (Appendix D) and the questionnaire (Appendix E). Questionnaires not fully completed were considered invalid and therefore were disregarded.

3.4 Confidentiality

Confidentiality was maintained in the following ways: respondents were not asked to supply their name, address or other information that would allow identification. There was no way of identifying respondents from their returned

questionnaires. The only identifying element on the questionnaires was a code indicating which university it originated from.

3.5 Data storage

All the answered questionnaires will be kept for a period of 5 years at the Durban University of Technology and then destroyed.

3.6 Data analysis

The data was entered into a computer on an Excel spreadsheet and then imported into the SPSS® for Windows™ and Excel® XP™. The responses were analysed statistically and the results appear in Chapter 4 and are discussed in Chapter 5.

3.6.1 Statistical analysis

Components of the Statistical Tests:

The captured data was analysed in 3 ways (Nel, 2007):

- 1) Descriptive statistics were analysed using frequency tables and graphs.
- 2) Correlation analysis was performed using non-parametric tests to determine whether there was any significant association between the

factors collected in the responses. The tests used were Pearson's Chi Square Test, Phi coefficient and Cramer's V test.

- 3) Dendrograms were generated, using the hierarchical cluster method. This allows the identification of clustered themes within responses, so that it could be determined whether answering one component would be more likely to indicate an answer to another component. Dendrograms were used to analyse questions that had more than one possible answer.

3.6.1.1 Non-parametric tests

Non-parametric tests differ from parametric tests in that the test structure is not specified beforehand but is instead determined from data. The term non-parametric is not meant to imply that such tests completely lack parameters but that the number and nature of the parameters are flexible and not fixed in advance. Non-parametric tests are therefore also called distribution free. They are mathematical procedures for statistical hypothesis testing which, unlike parametric statistics, make no assumptions about the frequency distributions of the variables being assessed. One of the most frequently used non-parametric tests are the chi-square tests (Wikipedia, 2007).

3.6.1.2 Pearson's Chi Square test

Pearson's chi-square test is one of a variety of chi-square tests; statistical procedures whose results are evaluated by reference to the chi-square distribution. It tests a null hypothesis that the relative frequencies of occurrence of observed events follow a specified frequency distribution. It is a non-parametric test of independence, determining whether one variable is affected by another variable. It does not measure the degree of the relationship, but is used to estimate the likelihood that some factor other than chance accounts for the apparent relationship (Wikipedia, 2007).

Chi-square is calculated by finding the difference between each observed and theoretical frequency for each possible outcome, squaring them, dividing each by the theoretical frequency, and taking the sum of the results. The computed chi square value is compared with a critical value in the chi square table, taking note of the appropriate degrees of freedom and level of significance. If the computed value exceeds the critical value in the table, assumption of independence can be rejected (Wikipedia, 2007). The level of significance was set at 5% ($p \leq 0.05$) in this study.

3.6.1.3 Cramer's V, Phi, Lambda and Kendall Tau Coefficients

Cramer's V test and Phi coefficient are correlation coefficients that indicate the relationship between two binary variables. Whereas Pearson's Chi-Square test indicates whether there is a relationship between variables, Cramer's V and Phi coefficients indicate the degree to which the relationship exists. Cramer's V is a variant of Phi coefficient that adjusts for the number of rows and columns of cross tabulations. It is more useful for larger tables. Cramer's V coefficient and Phi coefficient range from -1 to 1, with 0 indicating no relationship and -1 or 1 indicating a perfect relationship.

Kendall Tau coefficient indicates the strength of relationship between variables that are measured at the ordinal level.

Lambda coefficient indicates the strength of relationship between variables that are measured at the nominal level.

The general rule of thumb for correlation coefficient interpretation is:

- -1.0 to -0.7 strong negative association.
- -0.7 to -0.3 weak negative association.
- -0.3 to +0.3 little or no association.
- +0.3 to +0.7 weak positive association.
- +0.7 to +1.0 strong positive association (Simon, 2006).

3.6.1.4 Dendrograms

A dendrogram is a tree diagram frequently used to illustrate the arrangement of the clusters produced by a clustering algorithm. Data clustering is a common technique for statistical data analysis which is used to classify similar objects into different groups. It is used to partition a data set into subsets (clusters), so that the data in each subset shares some common trait. Data clustering may also be known as cluster analysis. Data clustering algorithms can be hierarchical or partitional. Hierarchical algorithms find successive clusters using previously established clusters, whereas partitional algorithms determine all clusters at once (Wikipedia, 2007).

The results appear in Chapter 4 and are discussed in Chapter 5.

CHAPTER 4

4 RESULTS

4.1 Introduction

Following the methodology described in Chapter 3, the study produced raw data in the form of 181 completed questionnaires.

The specific objectives of the data analysis were as follows:

- (1) To describe the demographic characteristics of individuals who responded to the questionnaire.
- (2) To describe the prevailing knowledge and perceptions of the sample.
- (3) To determine any statistically significant correlations between any of the demographic factors and the expressed views, including university of origin.
- (4) To identify clusters (if any) of view point correlates according to demographic or other factors.

4.2 Overview of results chapter

4.2.1 Descriptive data

4.2.1.1 Demographics (Questions 1 - 5)

These comprise distribution tables and graphs for the demographic data (gender, age category, ethnic group, university enrolled in, and year of study).

4.2.1.2 Knowledge of homoeopathy (Questions 6 – 13)

These comprised descriptions of central tendency and distribution frequencies for the data relating to the current level of knowledge of the respondents.

4.2.1.3 Perceptions of homoeopathy (Questions 13 – 30)

These comprised descriptions of central tendency and distribution frequencies for the data relating to the current perceptions and attitudes of the respondents towards homoeopathy.

4.2.1.4 Communication issues (Questions 31 – 37)

These comprised descriptions of central tendency and distribution frequencies for the data relating to the attitudes towards interdisciplinary communication of the respondents.

4.2.2 Analysis

4.2.2.1 Correlation analysis

The Chi Squared Co-efficient and Kendall's Tau Correlation Co-efficient were calculated to determine the existence of correlations between demographic and attitudinal, perception or communication variables as given by respondents in the sample. Further, Asymmetric Measures (Phi, Cramers V and Lambda) were used to measure the strength of the correlations. Direct comparison of results from the two universities in terms of statistically significant differences was not possible considering the nominal nature of the data collected (Nel, 2007). Differences are analysed here, and discussed in Chapter 5, in terms of correlation with demographic variables, one of which is university membership.

4.2.2.2 Cluster analysis

Cluster analyses were conducted to determine clusters of demographic and attitudinal or perceptual views.

4.2.3 Comments

This comprised a description of the comments made by respondents. Further discussion of these in light of the above statistical analysis follows in Chapter 5.

4.3 Abbreviations

H_0 = null hypothesis

H_1 = alternative hypothesis

S.D. = Standard deviation

z = Standardised z value for statistical measurements

p = two tailed probability of equalling or exceeding $z/2$

N.S. = No statistically significant difference

S = Statistically significant difference

p = level of significance: if $p \leq 0.05$ then a significant difference was concluded (5% level of significance)

p = level of significance: if $p \geq 0.05$ then no significant difference was concluded (5% level of significance)

4.4 Descriptive statistics

4.4.1 Part One: Personal information (Questions 1 – 5)

The distributions of the demographic variables are described in Tables 4.1 – 4.4 and Figures 4.1 – 4.6.

Table 4.1 Question 1: Gender

Gender	
Male	123
Female	58

Figure 4.1 Question 1: Gender

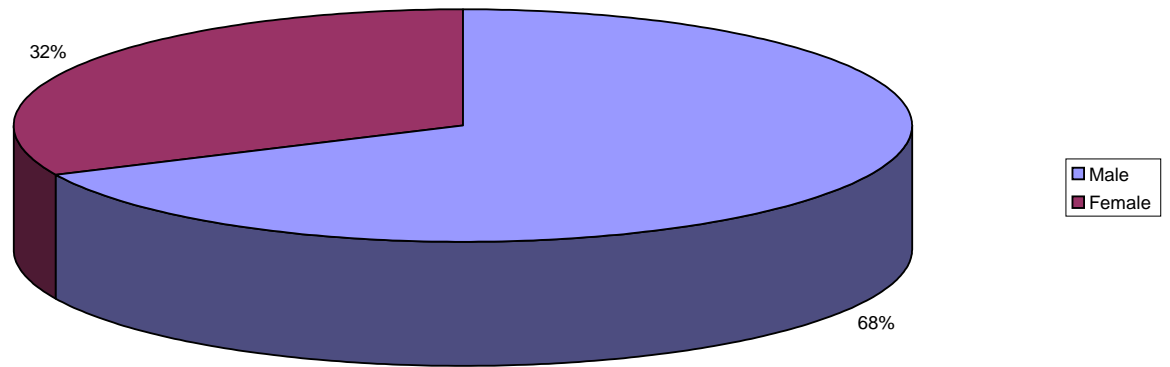
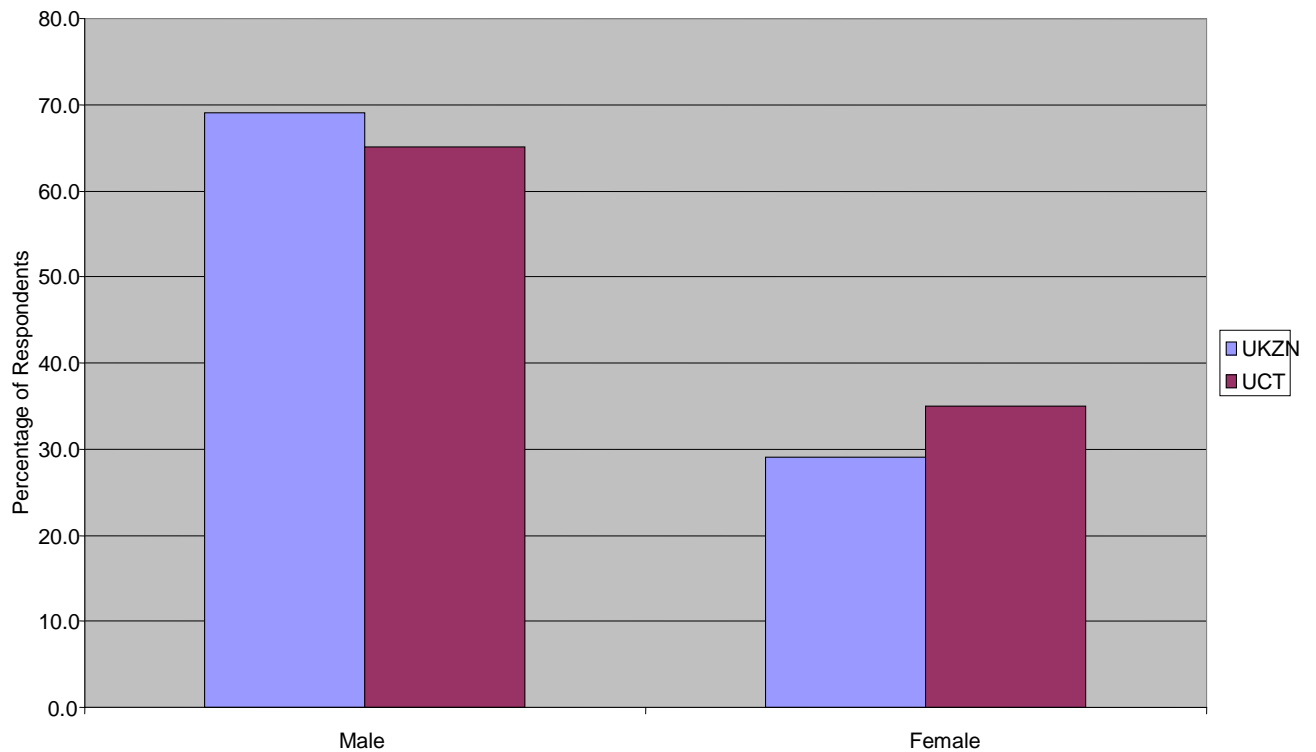


Figure 4.2 Question 1: Gender (by university)



Figures 4.1 and 4.2 show that more males than females are represented in the study. No data on the gender distribution of medical student population was collected. Thus it is impossible to assess whether the gender distribution of the sample is representative of the general medical student population or not.

Table 4.2 Question 2: Age (by category)

Age Category	No of Respondents
17-20	57
21-25	114
26-30	6
31-35	3
36-40	0
41 +	1

Figure 4.3 Question 2: Age

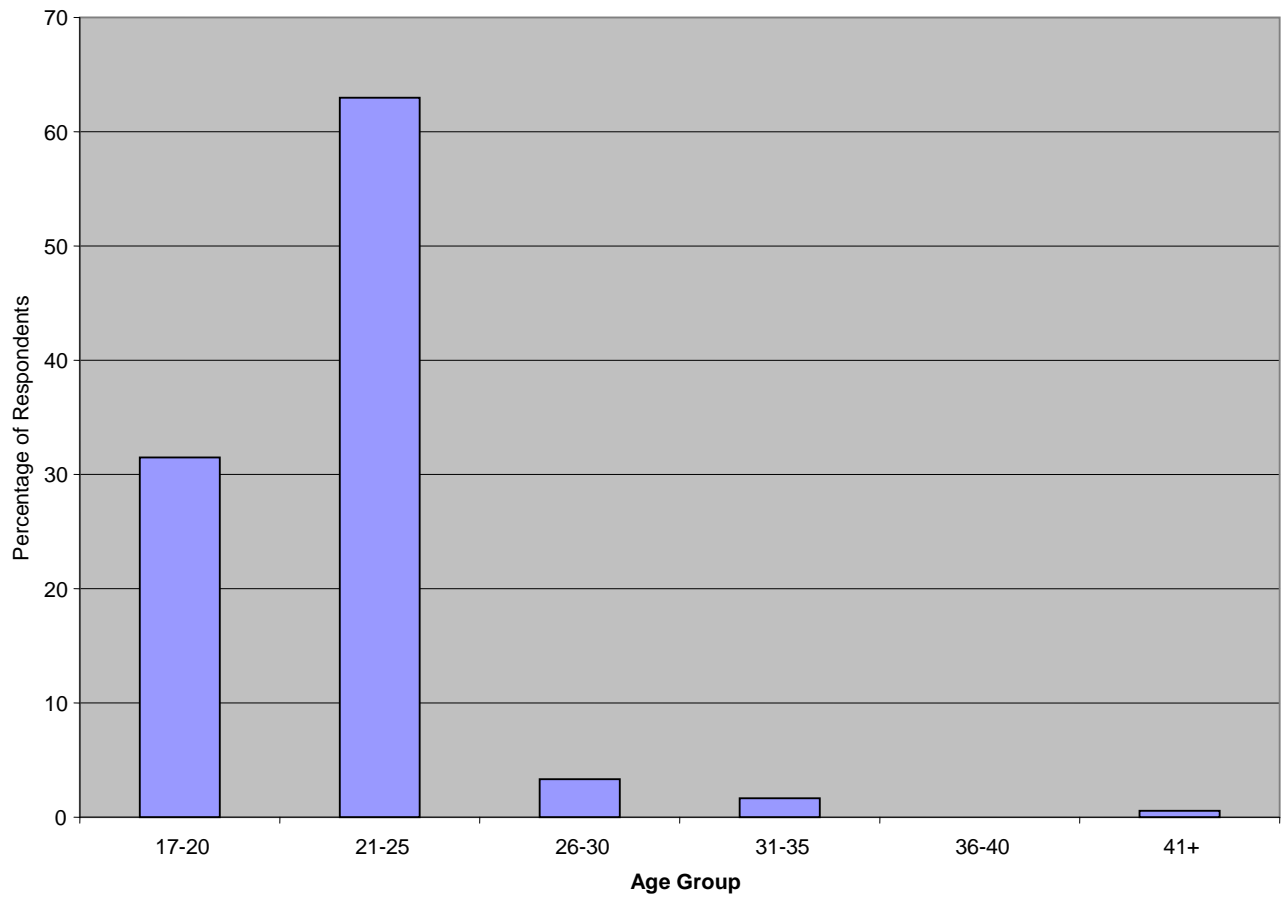


Figure 4.4 Question 2: Age (by university)

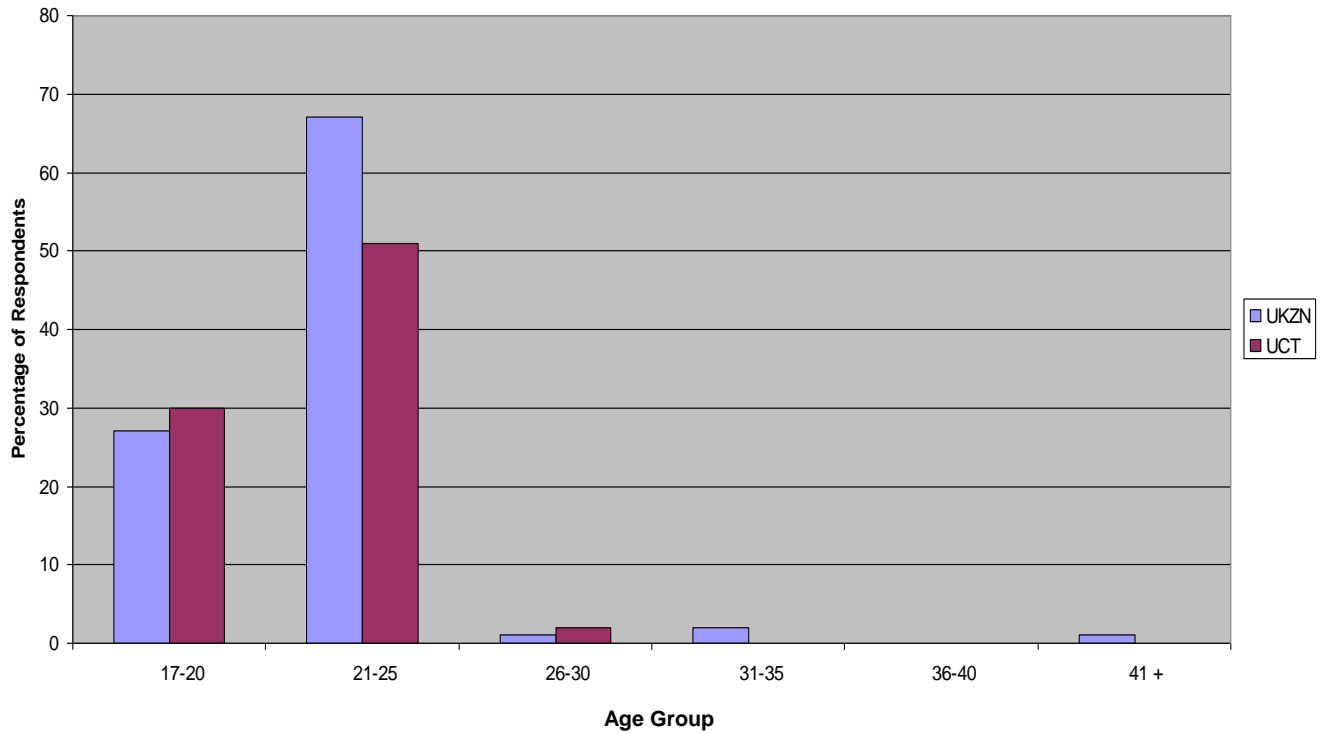


Table 4.2, Figure 4.3 and Figure 4.4 show that the majority (94%) of respondents were below 26 years of age. This is logical considering the fact that the sample comprised third year university students.

Table 4.3 Question 3: Ethnicity

Ethnic Distribution	
Asian	10
Black	81
Coloured	17
Indian	30
White	42
Other	1

Figure 4.5 Question 3: Ethnicity

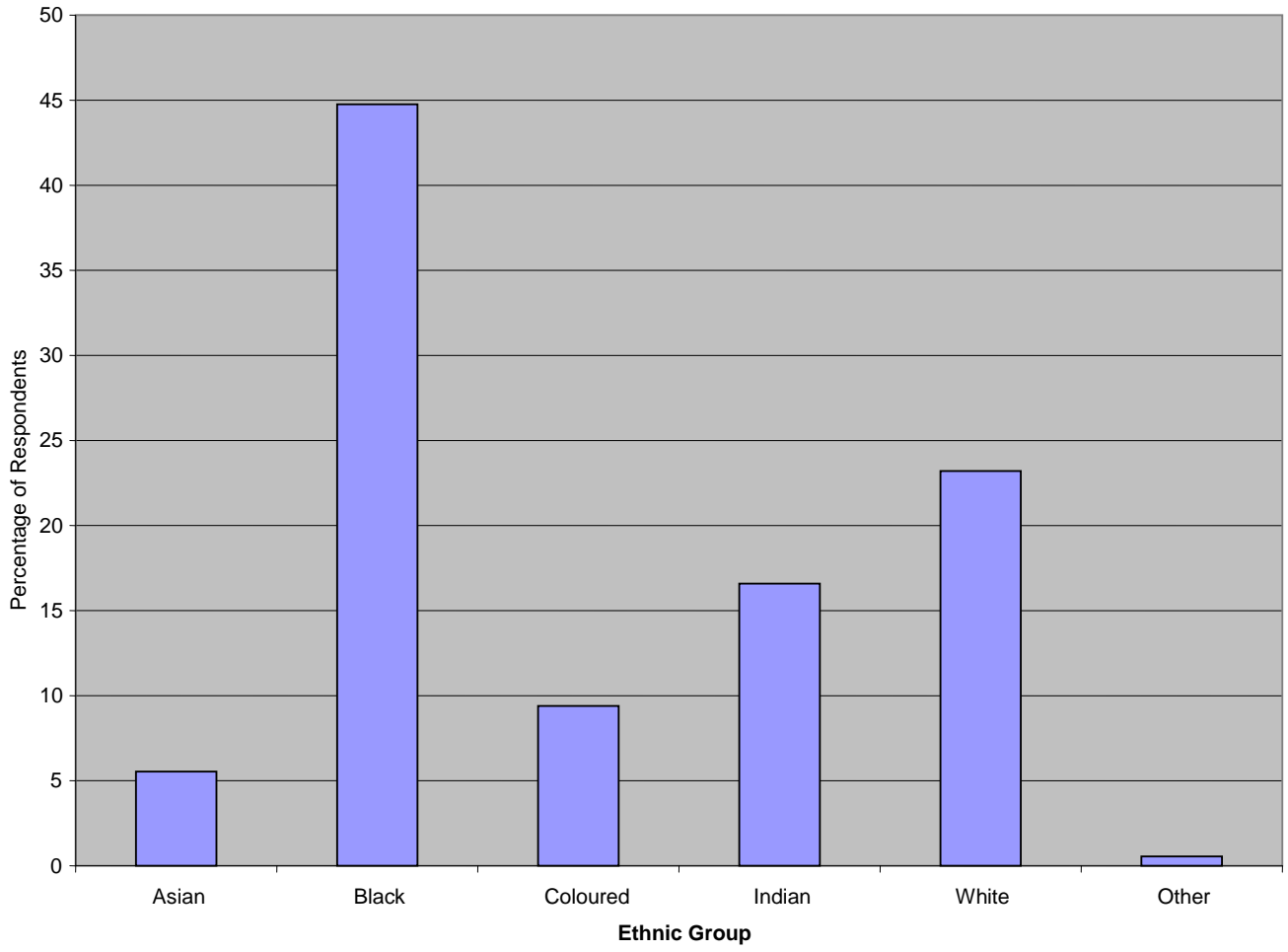
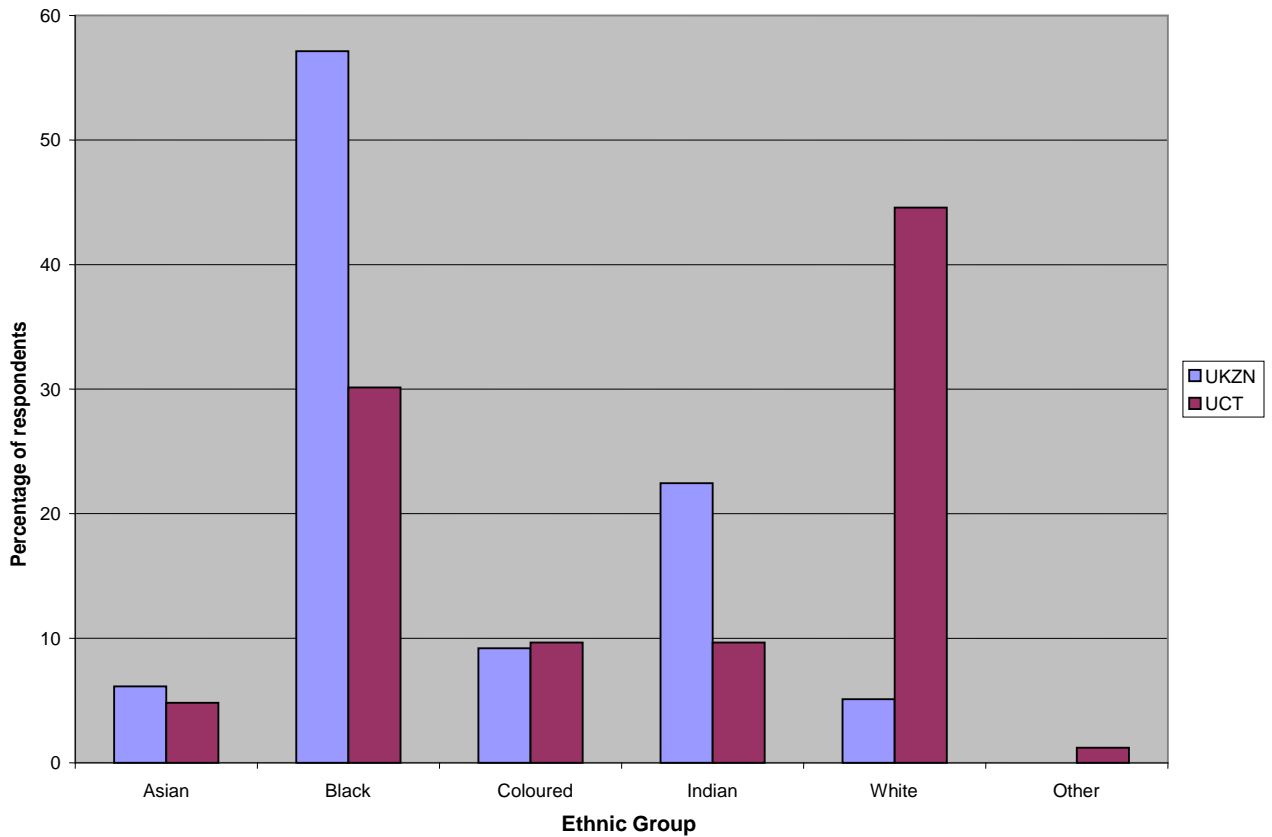


Figure 4.6 Question 3: Ethnicity (by university)



As can be seen from Figure 4.6 the ethnic composition at each university was very different.

Table 4.4 Question 4 and 5: University registered and year of study

University Registered	Number of Respondents	First Year	Second Year	Third Year	Fourth Year	Fifth Year
University of Kwa-Zulu Natal	98	0	0	98	0	0
University of Cape Town	83	0	0	83	0	0
	181	0	0	181	0	0

As can be seen from Table 4.4, all the respondents were registered for their third year of medicine, in conformity with the inclusion criteria of the study.

4.4.2 Part Two: Knowledge of homoeopathy (Questions 6 – 13)

In terms of Objective (2) of the Introduction, the respondents' knowledge of homoeopathy was described as reflected by the questionnaire.

Figure 4.7 Question 6: How would you describe your knowledge of homoeopathy?

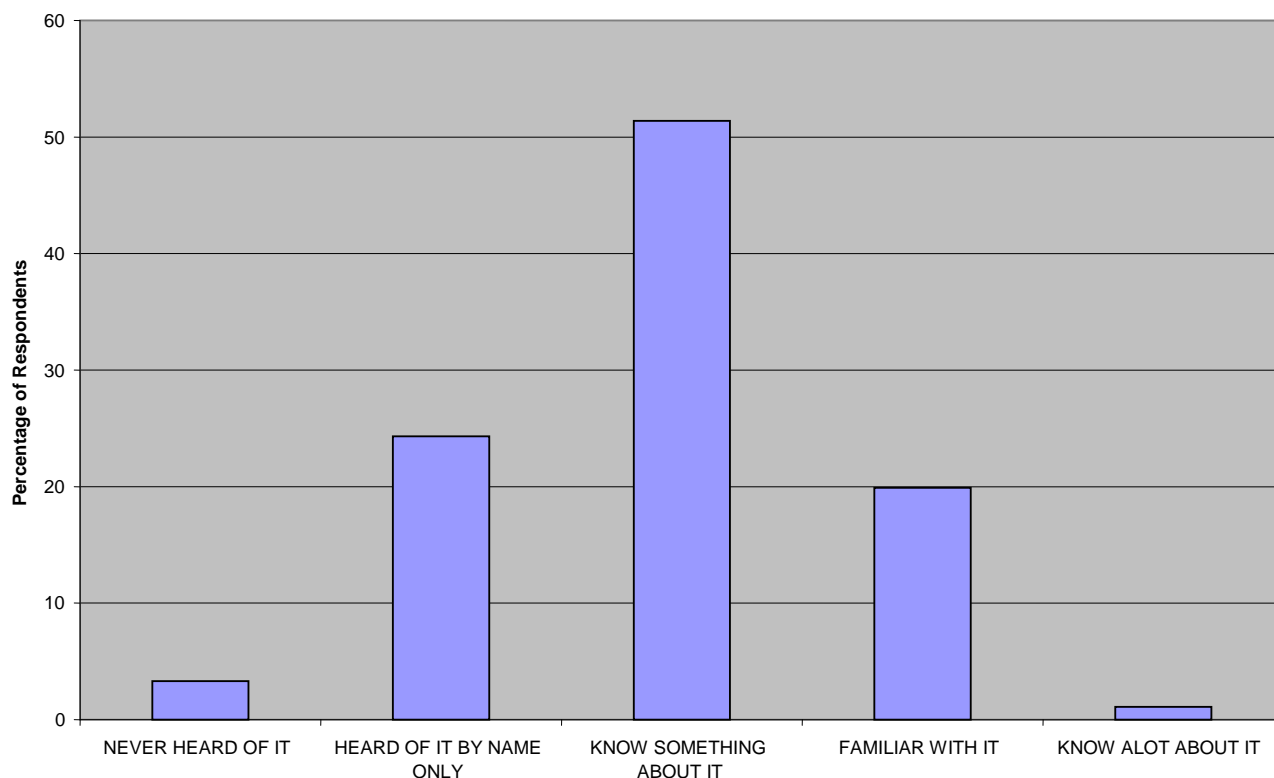
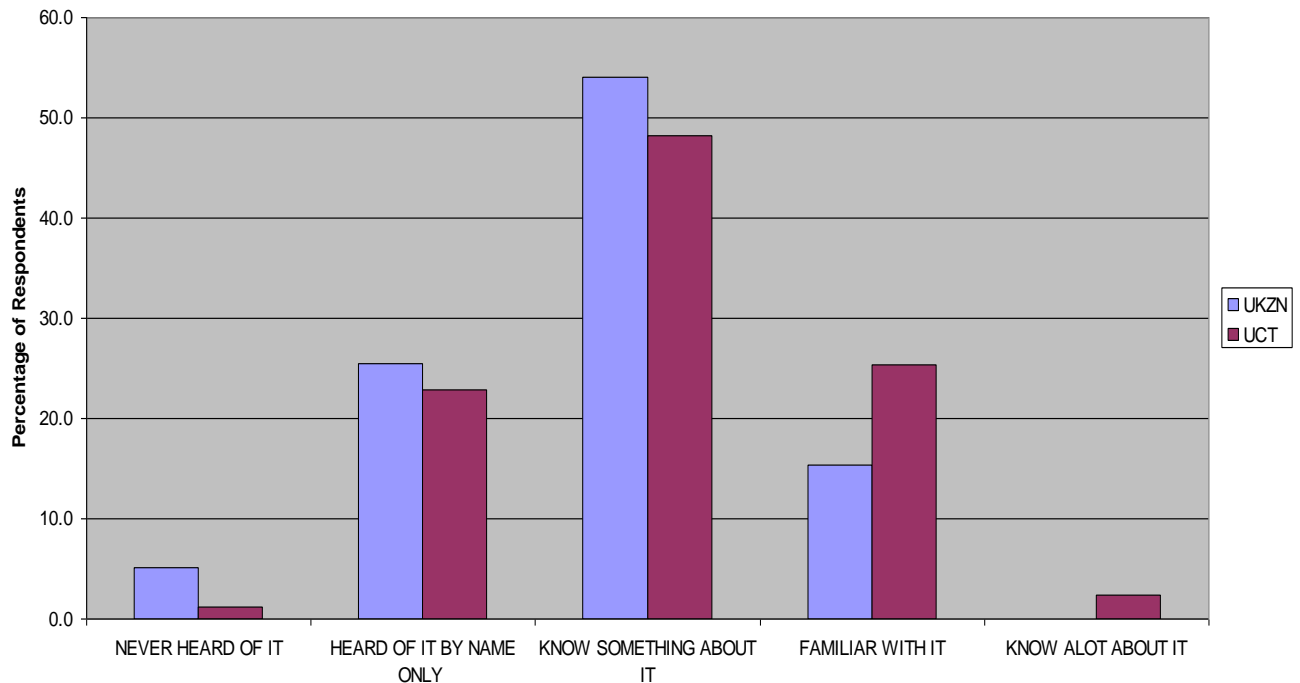
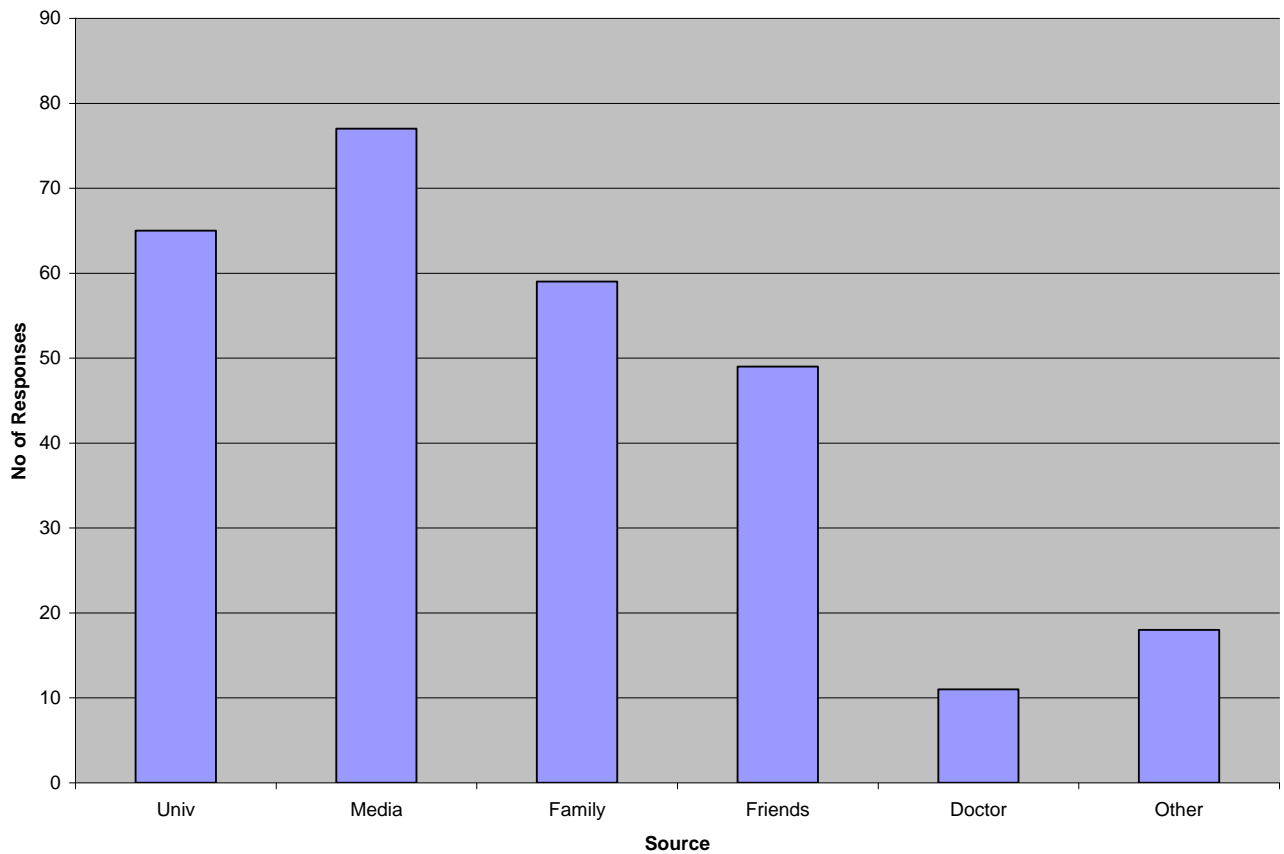


Figure 4.8 Question 6: How would you describe your knowledge of homoeopathy? (by university)



It is interesting to note from Figures 4.7 and 4.8 that most respondents (96%) had at least heard of homoeopathy before, with a substantial percentage (21%) being familiar or very knowledgeable about it. From these figures one can see that more UCT respondents are located at the high end of the knowledge spectrum, although correlation analysis does not reveal any significant difference overall between the universities on this question. However, correlation analysis reveals that there is a strong correlation between ethnic factors (see Table 4.5). Asian, Indian and White ethnic groups are more likely to have a better level of self described knowledge. Blacks are more likely to have a lower level of self described knowledge.

Figure 4.9 Question 6.1: If you have heard of homoeopathy before, where did you hear about it?



From Figure 4.9 it can be seen that informal sources of information (media, family and friends) form three substantial sources of information. Sixty five percent of the respondents gave the university as a source of knowledge. However, according to Figure 4.10 and Figure 4.11 only 7% of the respondents answered “Yes” to whether a homoeopathic module was incorporated into their medical training implying that whatever knowledge was gained through the university channel was for the most, informal.

Figure 4.10 Question 7: Is there a module on homoeopathy incorporated into your course?

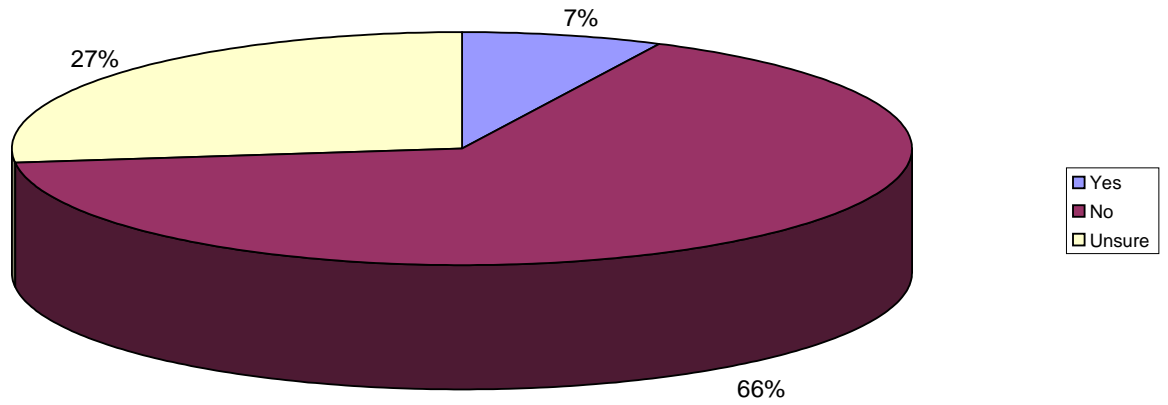


Figure 4.11 Question 7: Is there a module on homoeopathy incorporated into your course? (by university)

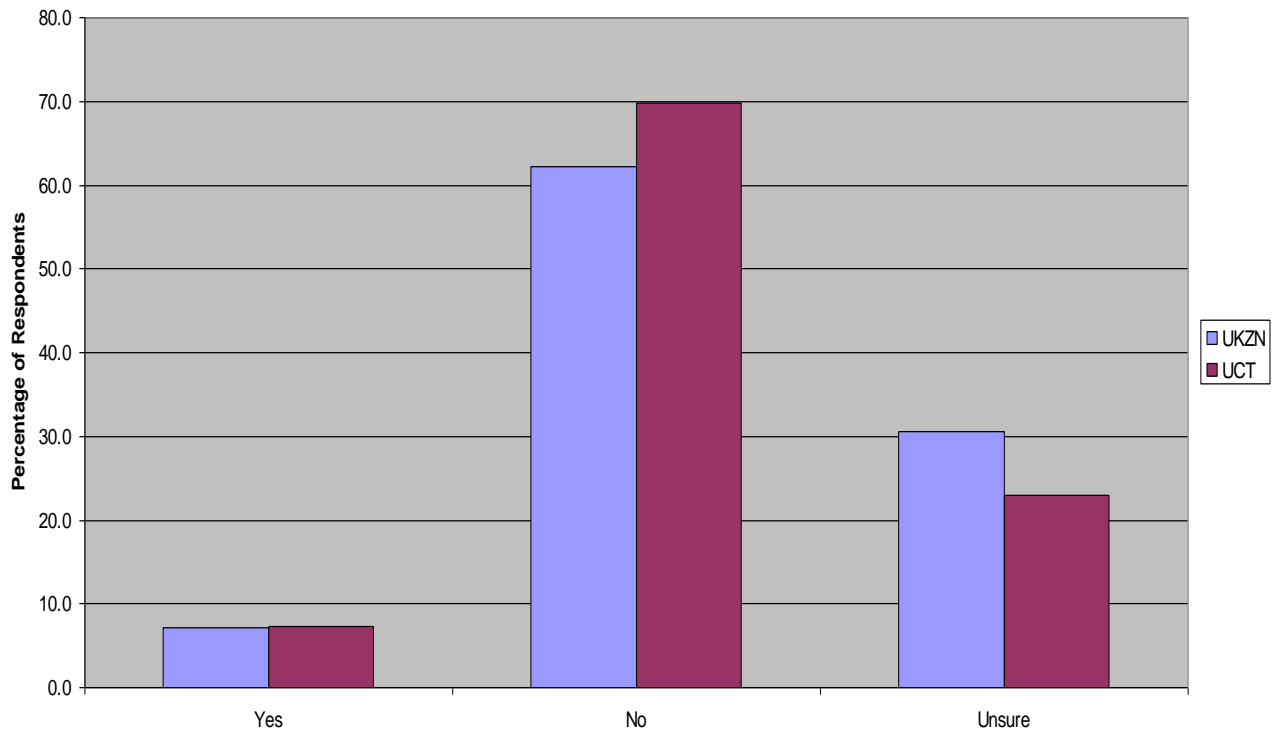


Figure 4.10 shows that 7% (13 respondents) answered “Yes” to the question. Of this number, 7 were from UKZN and 6 from UCT. At this point there is no formal alternative medicine module incorporated into the medical curriculum at the University of Cape Town (<http://www.health.uct.ac.za/>, 2007) or the University of KwaZulu Natal (Klingenberg and MacTaggot, 2006). The majority of respondents, 66% answered “No” to this question.

Figure 4.12 Question 8: Would you be interested in finding out more about homoeopathy?

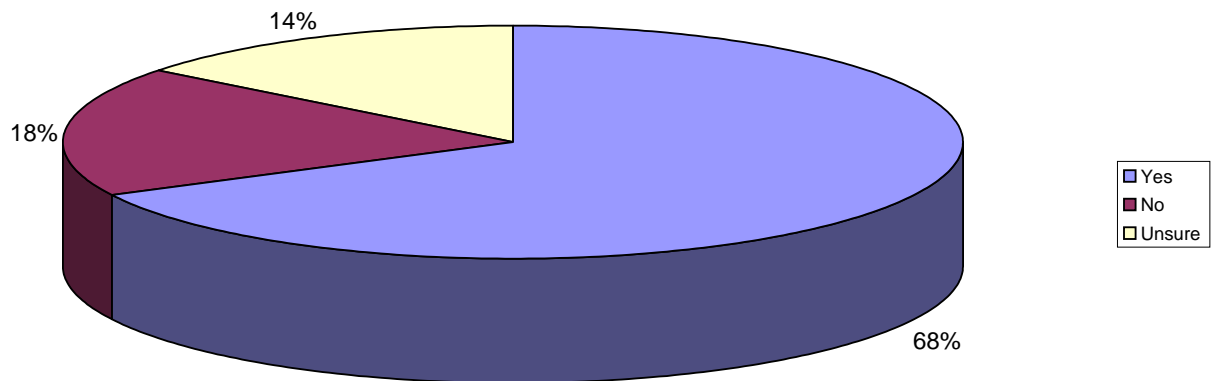
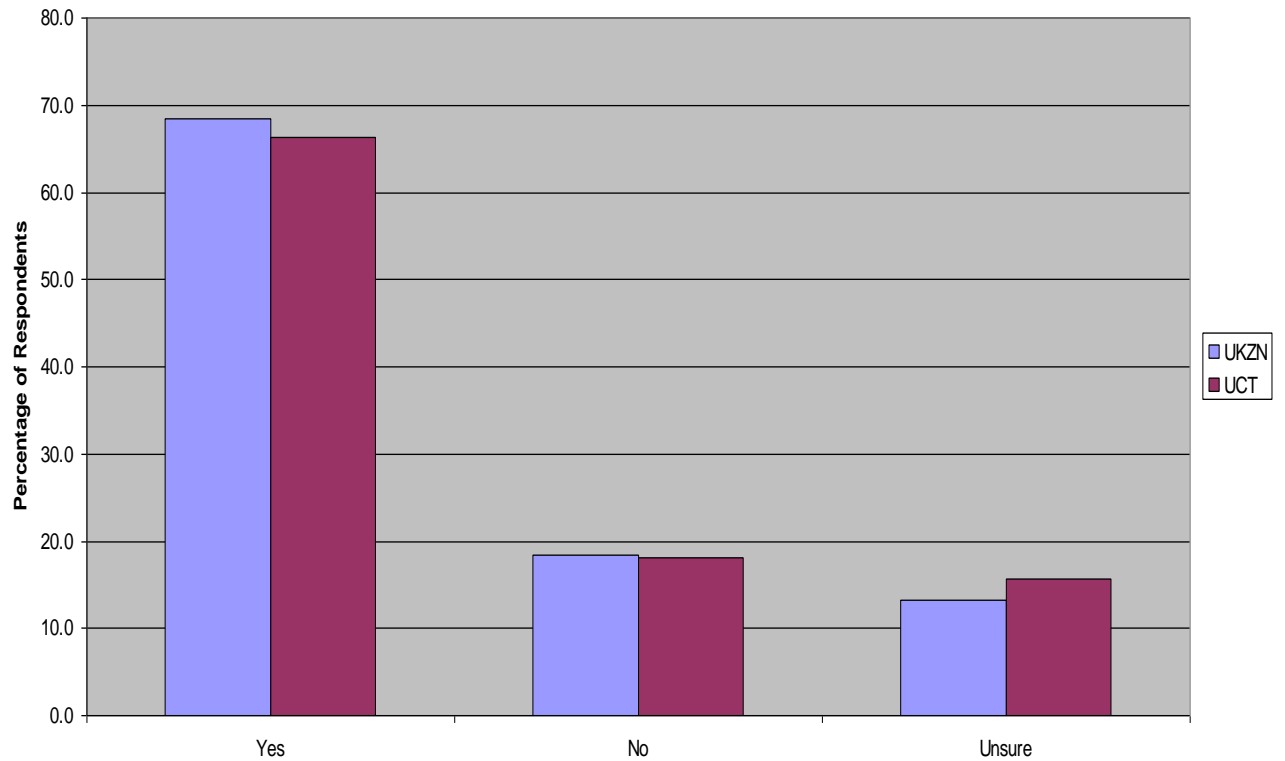


Figure 4.13 Question 8: Would you be interested in finding out more about homoeopathy? (by university)



Figures 4.12 and 4.13 show that the percentage of respondents who indicate an interest in learning more about homoeopathy is high (68%) and fairly evenly matched between the universities. This possibly reflects a growing awareness of alternative forms of treatment.

Figure 4.14 Question 9: Have you ever been treated by a homoeopath?

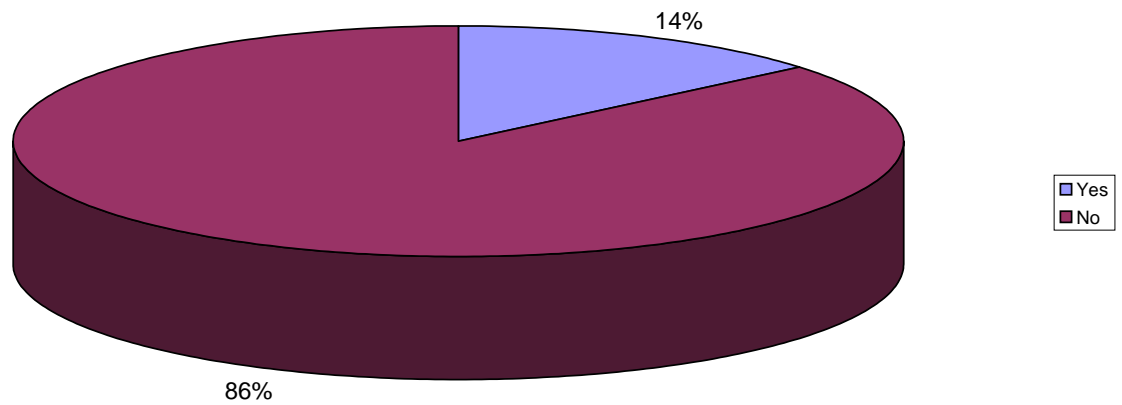
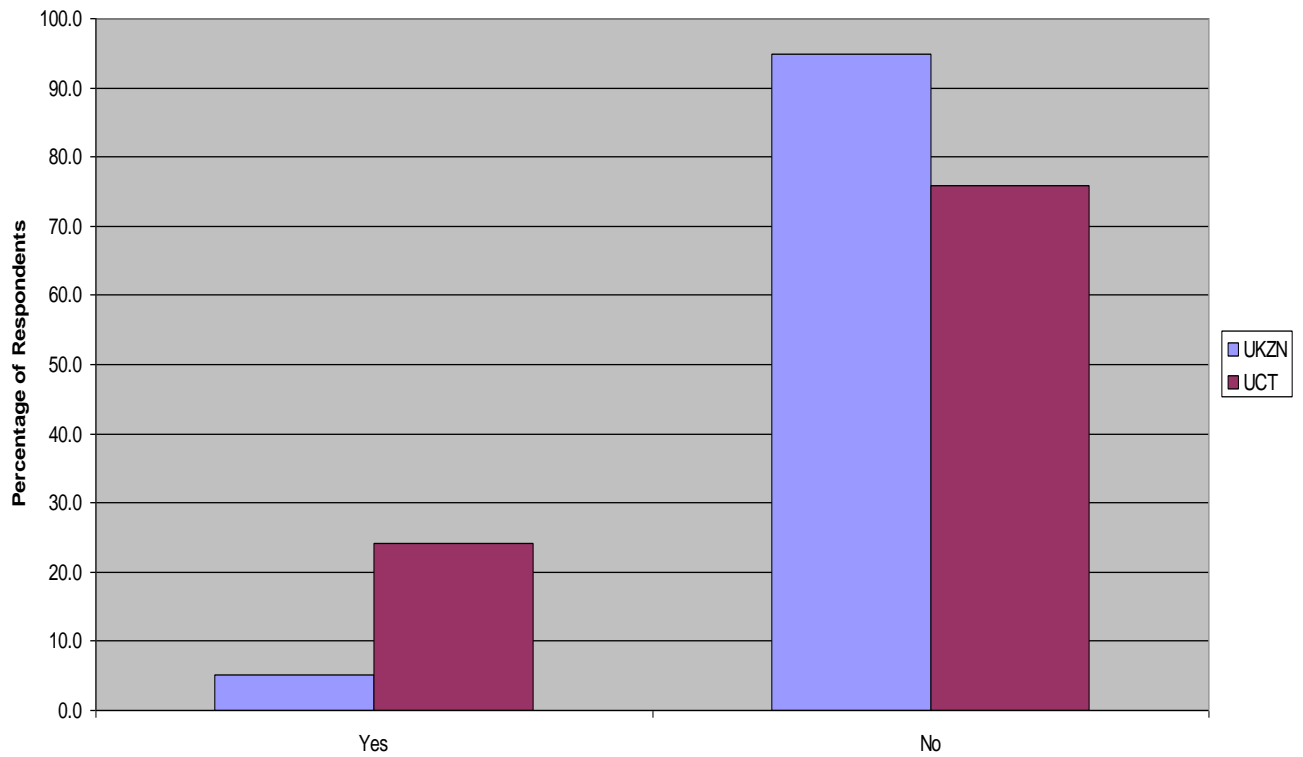


Figure 4.15 Question 9: Have you ever been treated by a homoeopath? (by university)



Figures 4.14 and 4.15 show that even though the majority (86%) of the respondents had never seen a homoeopath, there was still a large number (14%, 25 respondents) that had been treated by a homoeopath. Correlation analysis reveals that there is a weak correlation between university factors (see Table 4.5). UCT respondents were more likely to have been treated by a homoeopath before. Correlation analysis also reveals that there is a medium correlation between ethnic factors (see Table 4.5). Whites are most likely to have been treated homoeopathically.

Figure 4.16 Question 10: Do you know if there are any training courses available in South Africa for people to become homoeopaths?

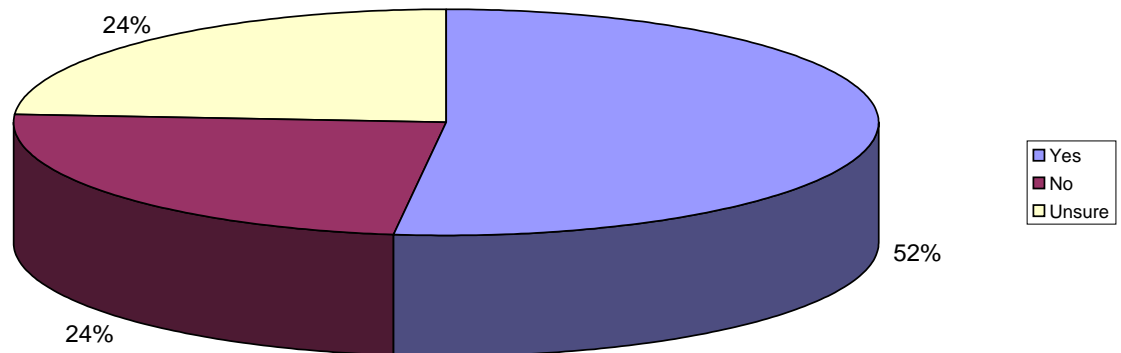
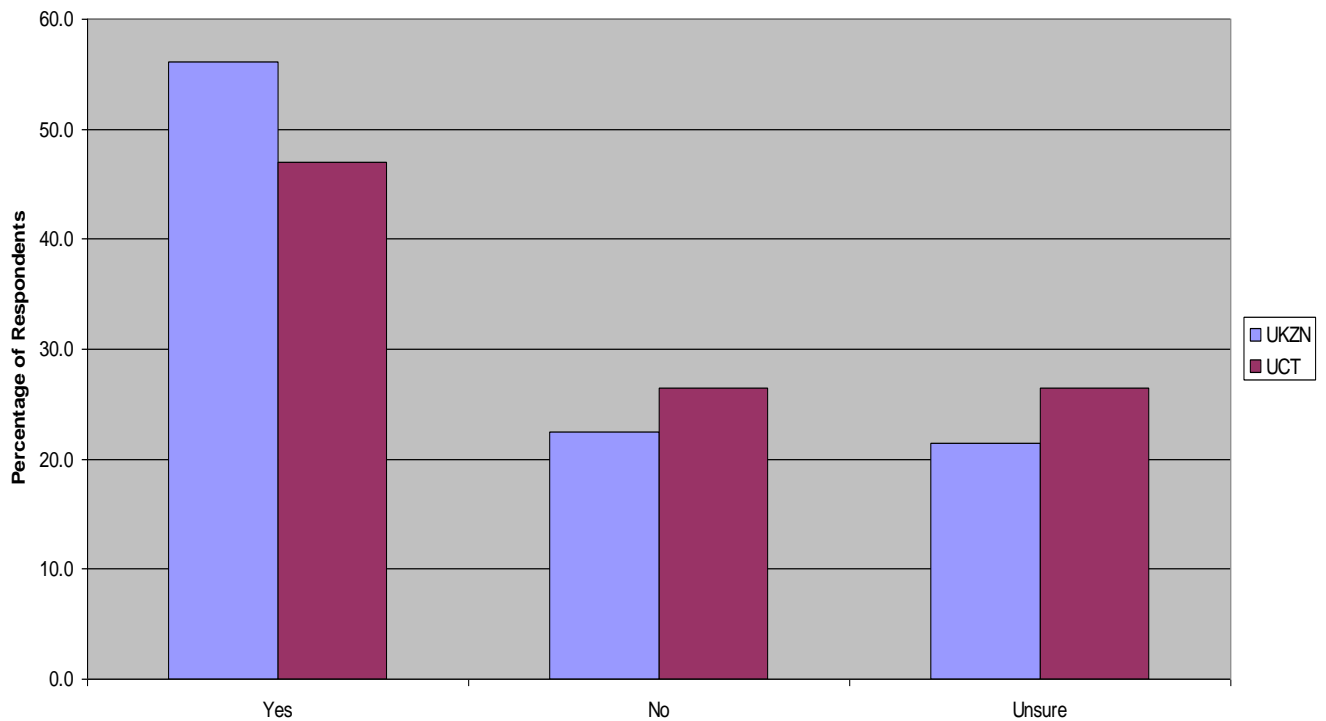


Figure 4.17 Question 10: Do you know if there are any training courses available in South Africa for people to become homoeopaths? (by university)



Figures 4.16 and 4.17 show that 52% of respondents were certain that there are training courses in this country. This is more than half of the respondents and shows some level of awareness of homoeopathic training. Less than a quarter of the respondents answered the question incorrectly by stating that there are no homoeopathic training courses in this country.

Figure 4.18 Question 11: Indicate how many years you believe it requires to qualify as a homoeopath

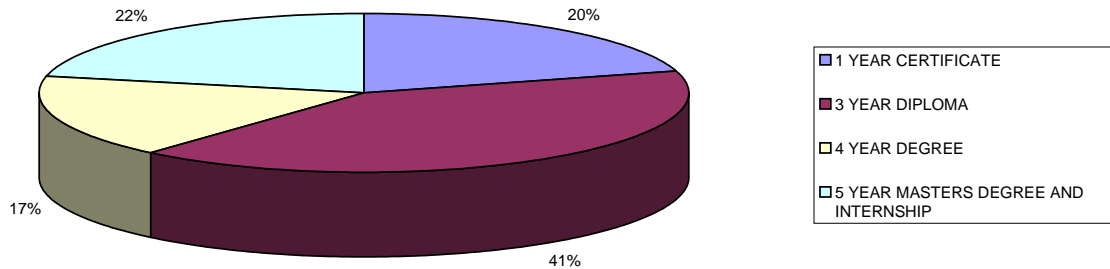


Figure 4.19 Question 11: Indicate how many years you believe it requires to qualify as a homoeopath (by university)

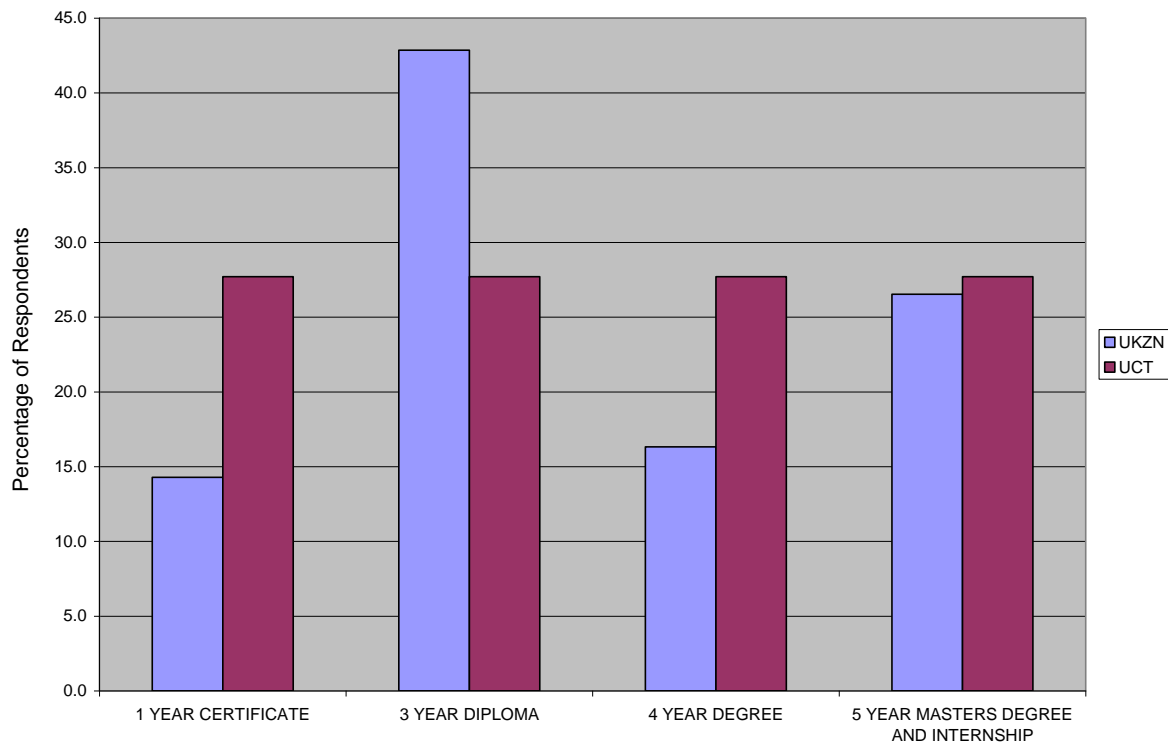


Figure 4.20 Question 12: Is homoeopathy recognised by law in South Africa?

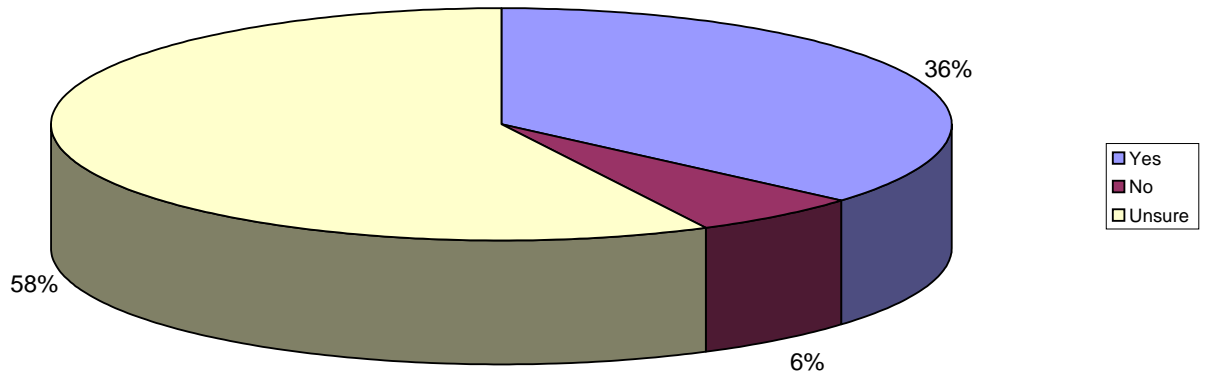
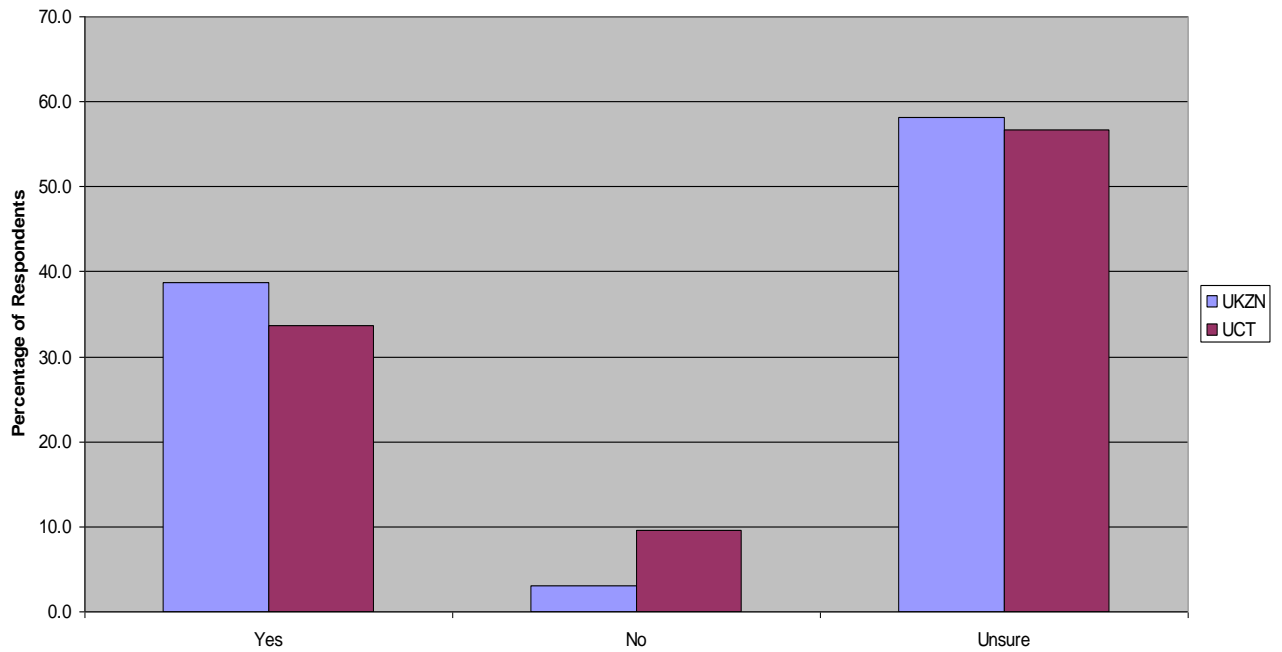


Figure 4.21 Question 12: Is homoeopathy recognised by law in South Africa? (by university)



Figures 4.20 and 4.21 show that the majority of the respondents were unsure of the legal status of homoeopathy in South Africa. This reinforces the perception of a gap between professed interest and actual knowledge. In this question the wording may have been misleading i.e. what does being recognised by law mean. More exact wording as to the legal status of practicing homoeopaths could have elicited more exact responses.

Figure 4.22 Question 13: Do health care insurers in South Africa fund homoeopathy?

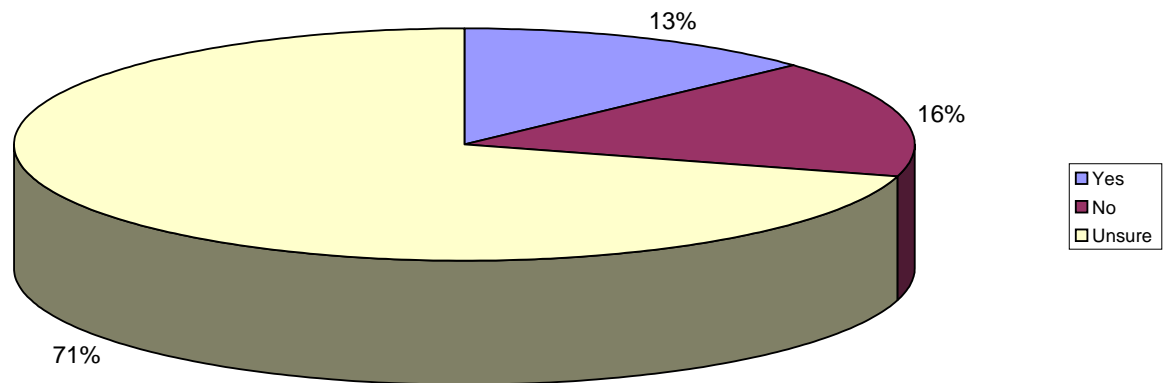
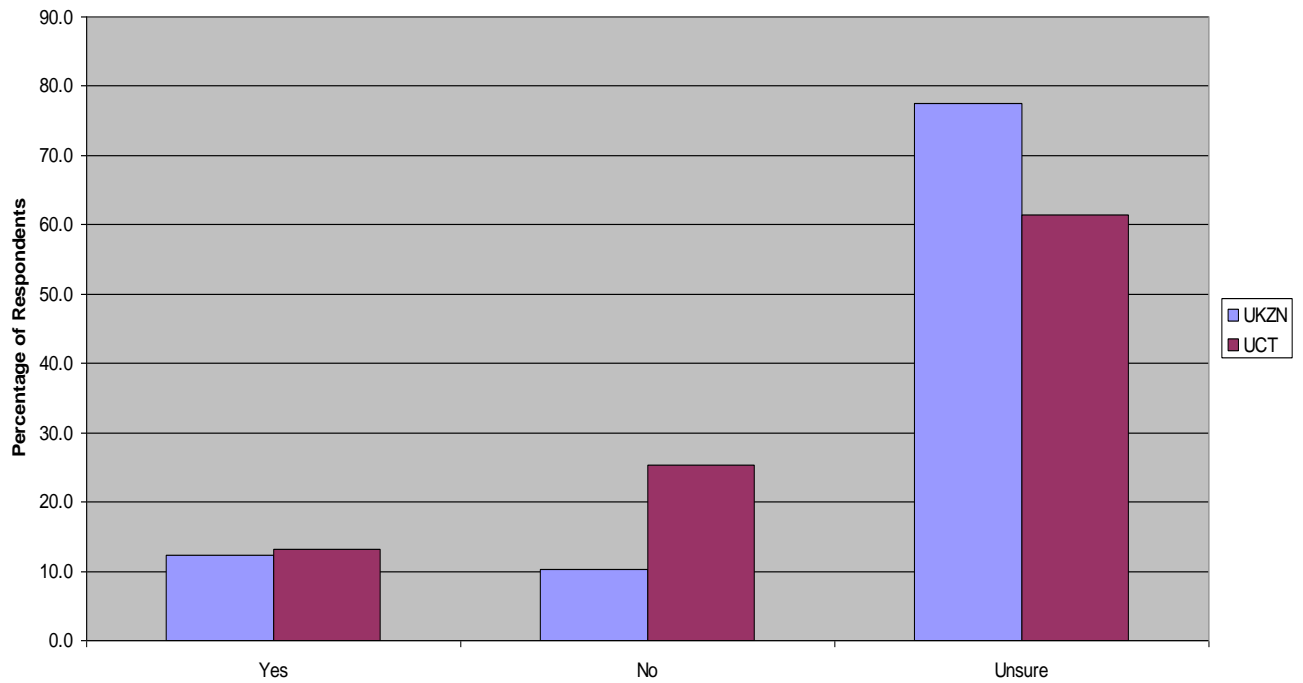
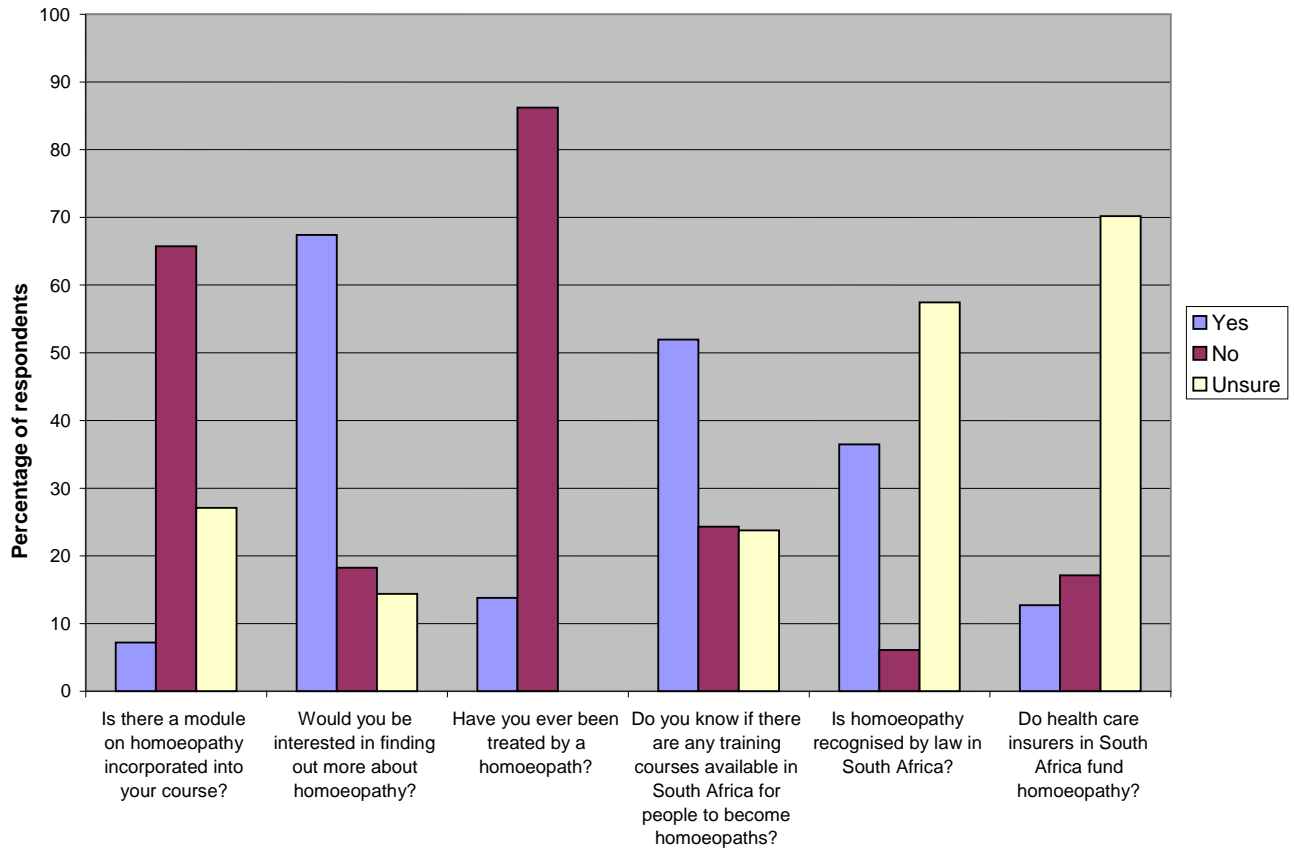


Figure 4.23 Question 13: Do health care insurers in South Africa fund homoeopathy? (by university)



Figures 4.22 4.23 show that the majority of respondents were unsure of the status of homoeopathy with respect to reimbursement by medical aid schemes.

Figure 4.24 Summary of respondents' knowledge of homoeopathy



The overview in Figure 4.24 seems to suggest that there is a substantial interest in homoeopathy. The type and level of interest is undifferentiated in the questionnaire. It could be casual interest or interest that will be pursued academically. The level of expressed interest does not necessarily match the level of knowledge. It is evident from this figure that interest in homoeopathy is high, while experience and knowledge of homoeopathy is relatively low.

4.4.3 Part Three: Perceptions of homoeopathy (Question 14 – 30)

Figure 4.25 Question 14: Do you believe homoeopathy has any scientific basis?

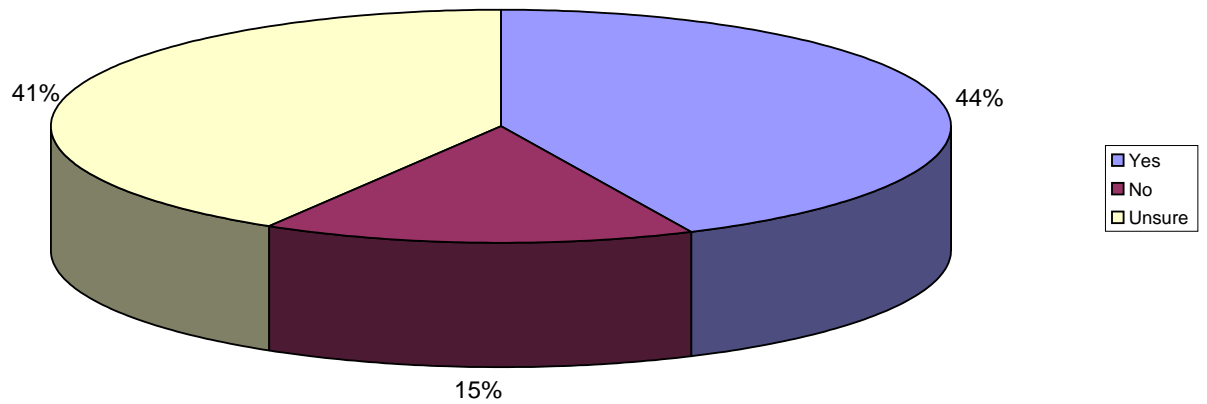
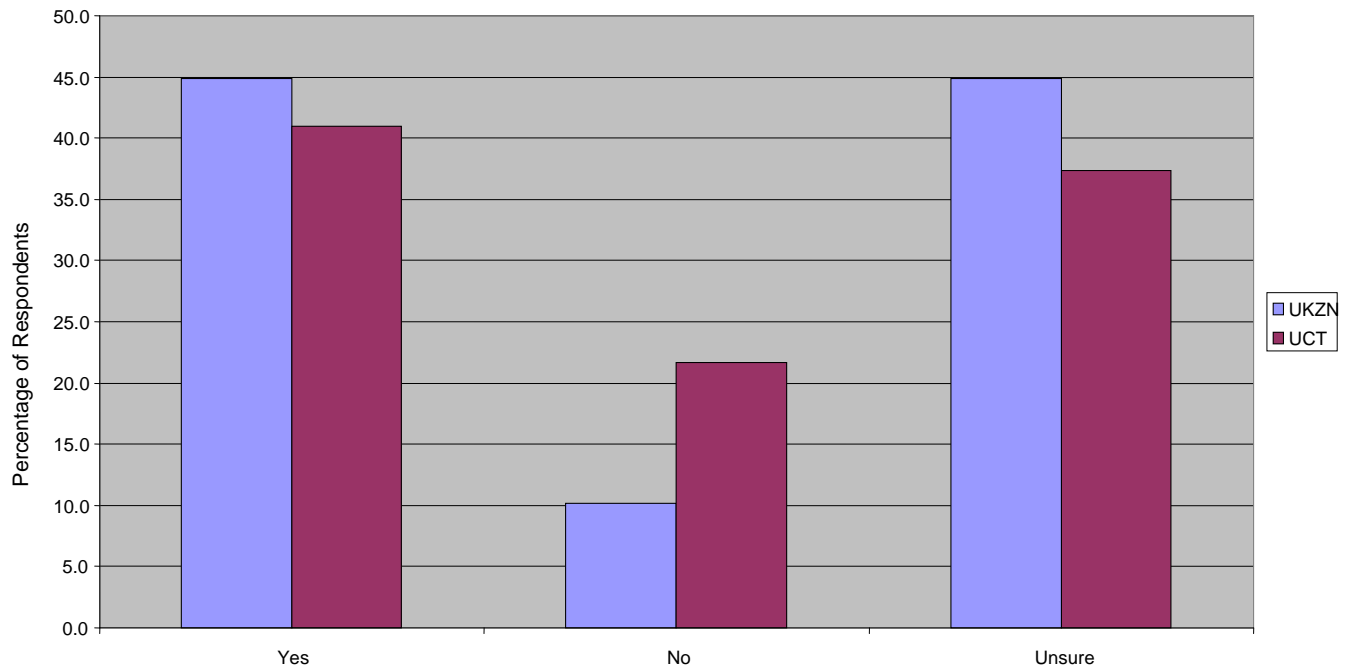


Figure 4.26 Question14: Do you believe homoeopathy has any scientific basis? (by university)



As can be seen from Figures 4.25 and 4.26; the “Yes” result is a lot higher than the “No” result. It is interesting to note that there are more “No” results from UCT respondents than UKZN respondents, although correlation analysis does not show any difference overall in the results of this question. Correlation analysis does show that there is a weak correlation between ethnic factors. Coloureds were most likely to answer “Yes”, Blacks most likely to answer “Unsure” and Whites most likely to answer “No” to whether homoeopathy has any scientific basis.

Figure 4.27 Question 15: If you answered 'NO' to the above question, which statement explains your reasoning best?

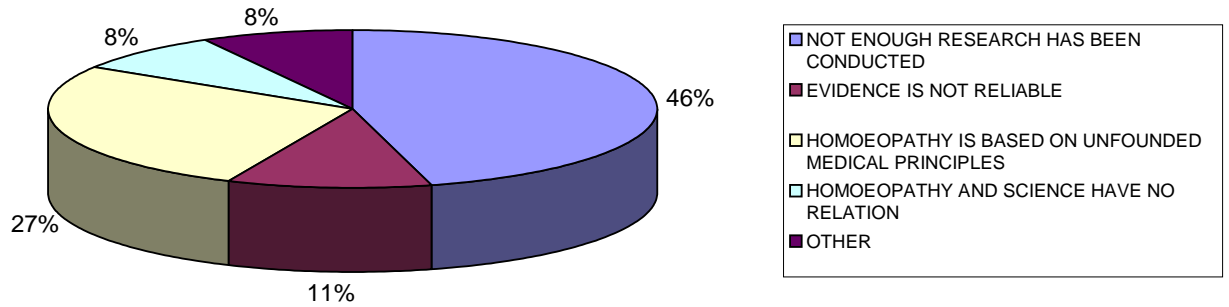
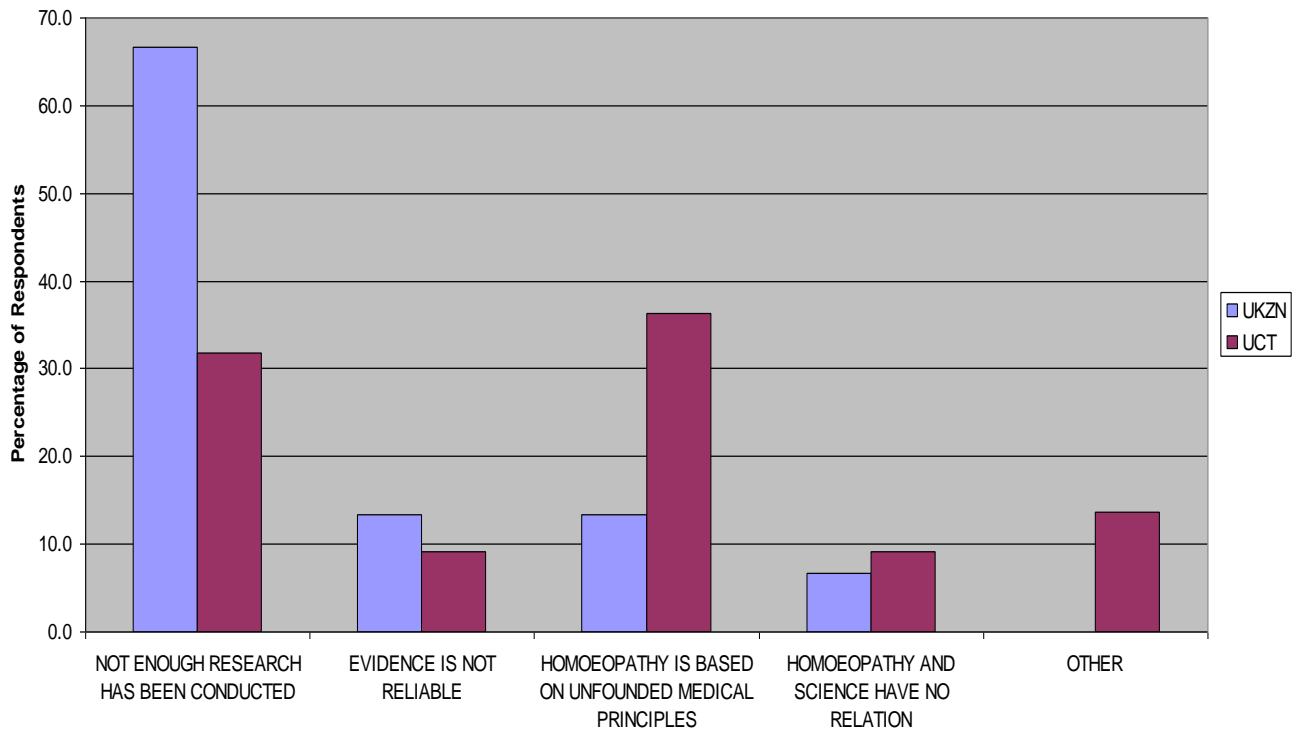


Figure 4.28 Question 15: If you answered 'NO' to the above question, which statement explains your reasoning best? (by university)



Figures 4.27 and 4.28 show that only 15% of respondents felt that homoeopathy does not have any scientific basis. The main reason cited was the paucity of research.

There were 15 respondents who commented 'other', of these 3 specified their reasoning:

- Some homoeopathic remedies may have a scientific basis but not all of them.
- The outcomes of the conducted researches are not scientifically sound.
- The studies that are conducted are often based on observable results and not necessarily scientific research. It is also based on experience.

Figure 4.29 Question 16: Do you consider homoeopathy to be a legitimate form of medicine?

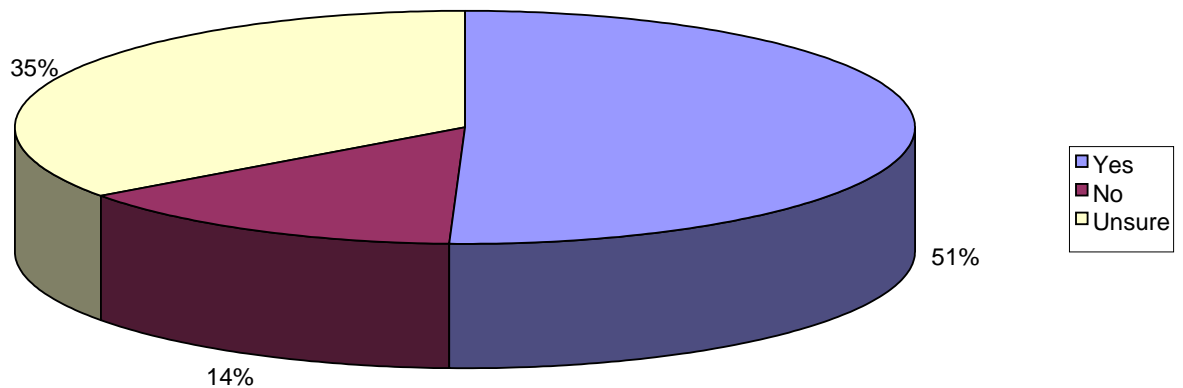
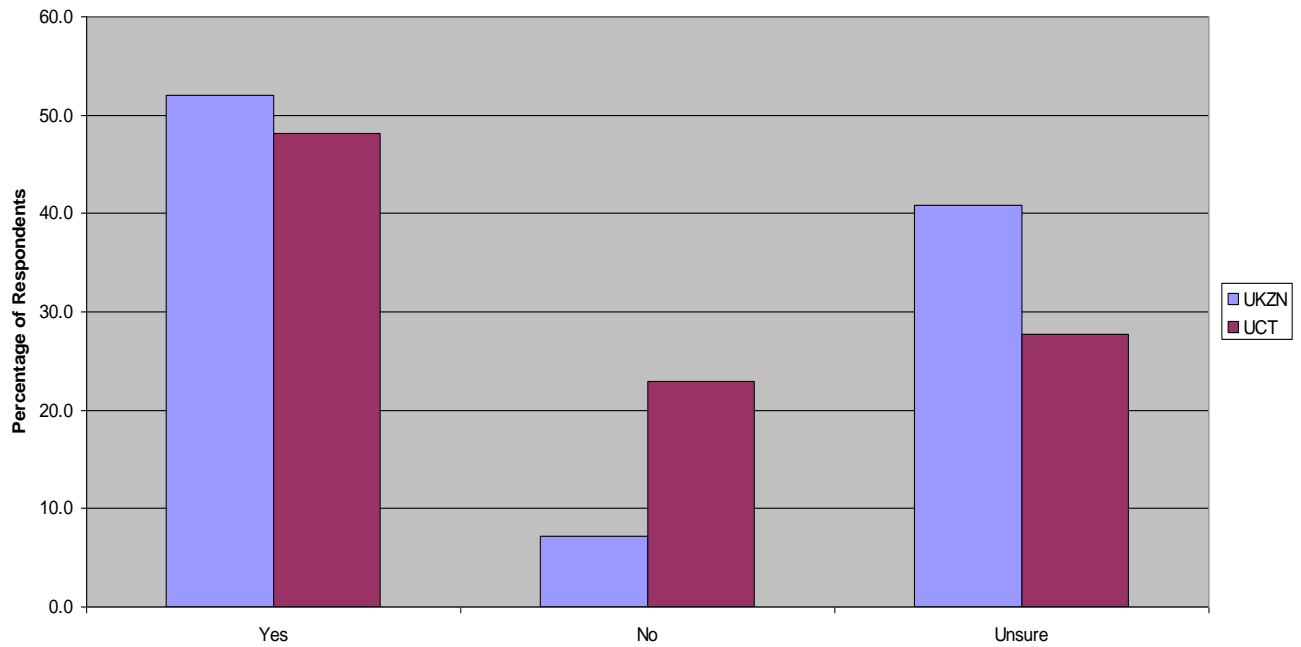


Figure 4.30 Question 16: Do you consider homoeopathy to be a legitimate form of medicine? (by university)



Figures 4.29 and 4.30 further reflect the interest that respondents reported in homoeopathy. The system is viewed with legitimacy by at least 50% of the respondents. Correlation analysis reveals that there is a very weak correlation between factors (see Table 4.6). UCT respondents were more likely than UKZN respondents to not view homoeopathy as a legitimate form of medical treatment. UKZN respondents were more likely to either feel that it is a legitimate form or to be unsure.

Figure 4.31 Question 17: What does the studying of homoeopathy in South Africa entail to become a registered homoeopathic practitioner?

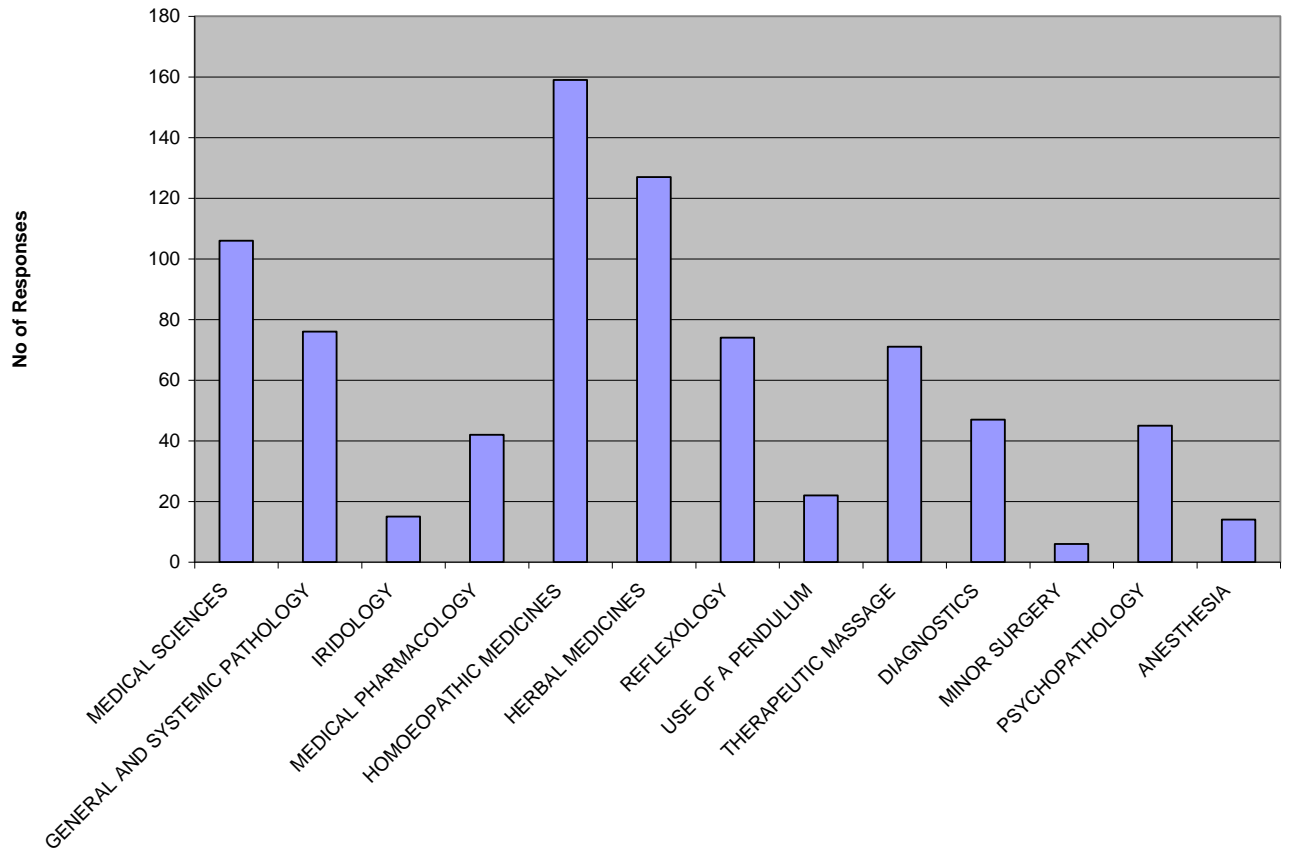
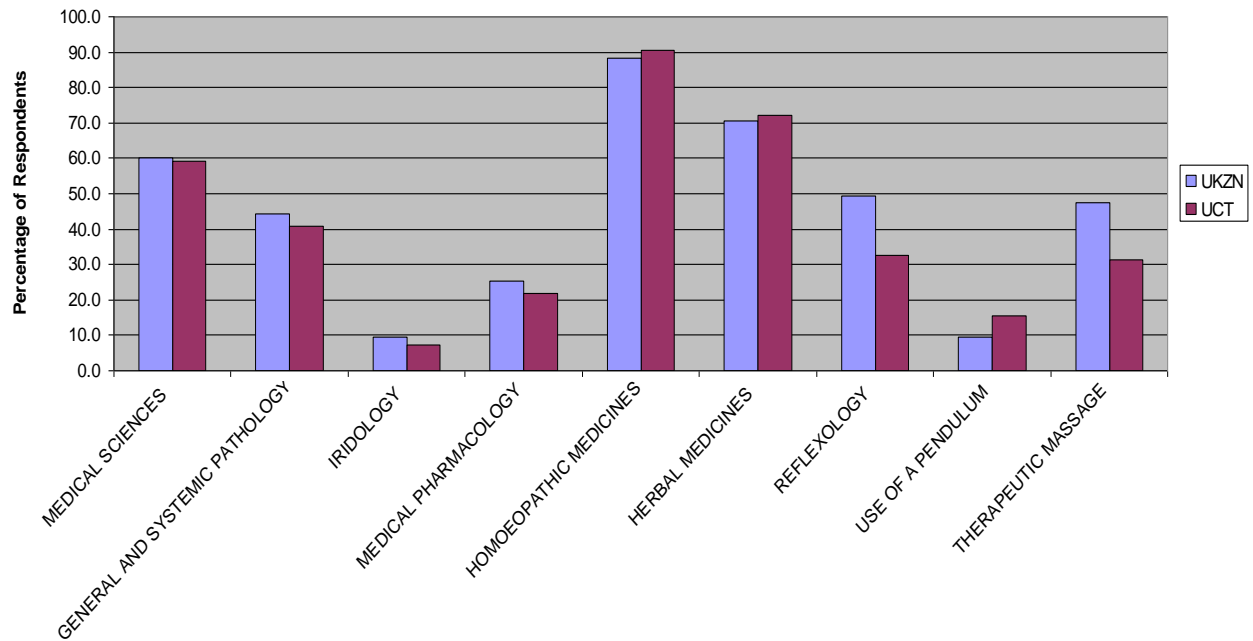


Figure 4.32 Question 17: What does the study of homoeopathy in South Africa entail to become a registered homoeopathic practitioner? (by university)



The responses recorded in Figures 4.31 and 4.32 can be broken into three categories:

- Low-level (below 40 responses - minor surgery, iridology, anaesthesia, pendulum use).
- Mid-level (between 40 and 80 responses - psychopathology, diagnostics, therapeutic massage, reflexology, medical pharmacology and general and systemic pathology).
- High-level (above 80 responses - medical sciences, homoeopathic medicines, herbal medicines).

The low level responses correctly recognise subjects that are not part of the homoeopathic training. The high level responses correctly recognise subjects

that do form part of the homoeopathic training, while the mid level responses classify both subjects that do and do not form part of the training (e.g. therapeutic massage and reflexology vs. general and systemic pathology). This category represents the subjects of most confusion with respect to general perceptions of homoeopathic training and what it entails.

Figure 4.33 Question 18: Do you believe homoeopathic medicine to be a form of placebo treatment?

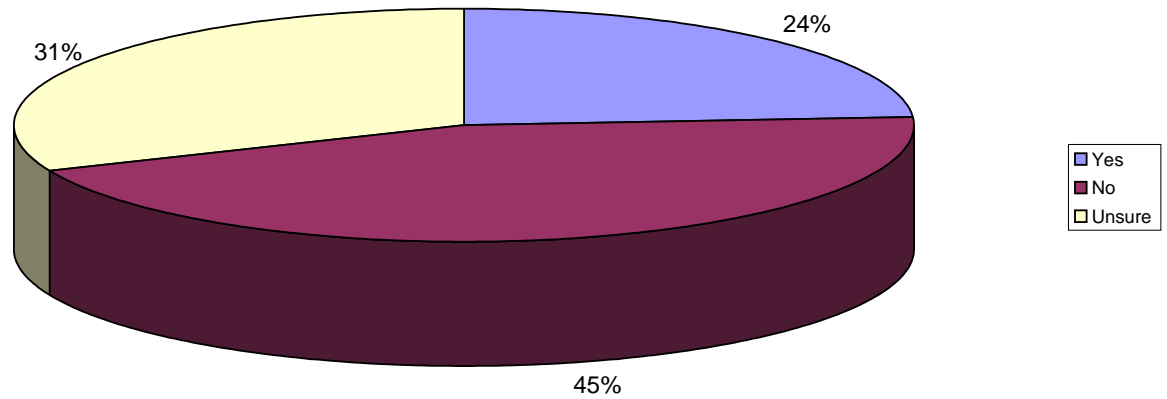
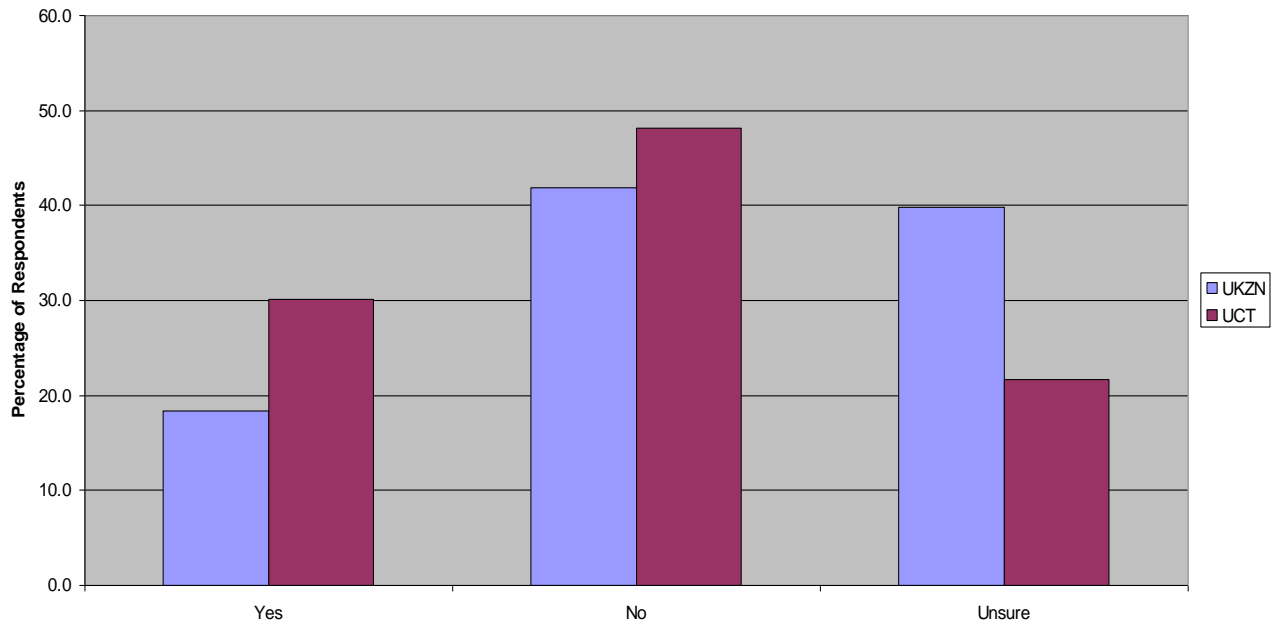


Figure 4.34 Question 18: Do you believe homoeopathic medicine to be a form of placebo treatment? (by university)



Figures 4.33 and 4.34 reflect the level of legitimacy with which homoeopathy is viewed for the most part. Only 24% felt that homoeopathy is attributable to a placebo effect. Correlation analysis reveals that there is a very weak correlation between university factors. UCT respondents were more likely than UKZN respondents to believe homoeopathy to be a placebo. UKZN respondents were more likely to be unsure or believe it to not be a form of placebo (See Table 4.6). Correlation analysis also reveals that there is a weak correlation between ethnic factors (see Table 4.6). Asians and Whites were most likely to believe, while Indians were most likely to not believe homoeopathy to be a form of placebo treatment.

Figure 4.35 Question 19: If you answered 'YES' to the above question, which statement best explains your reasoning?

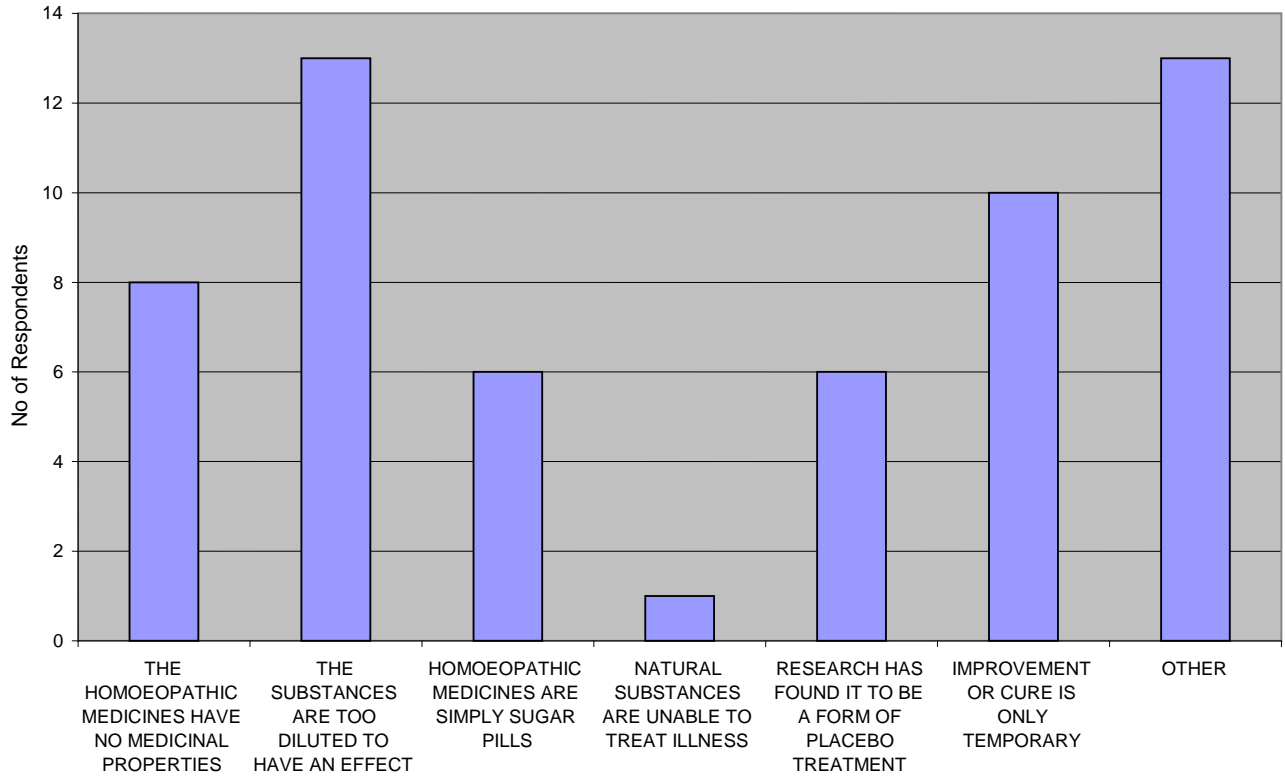
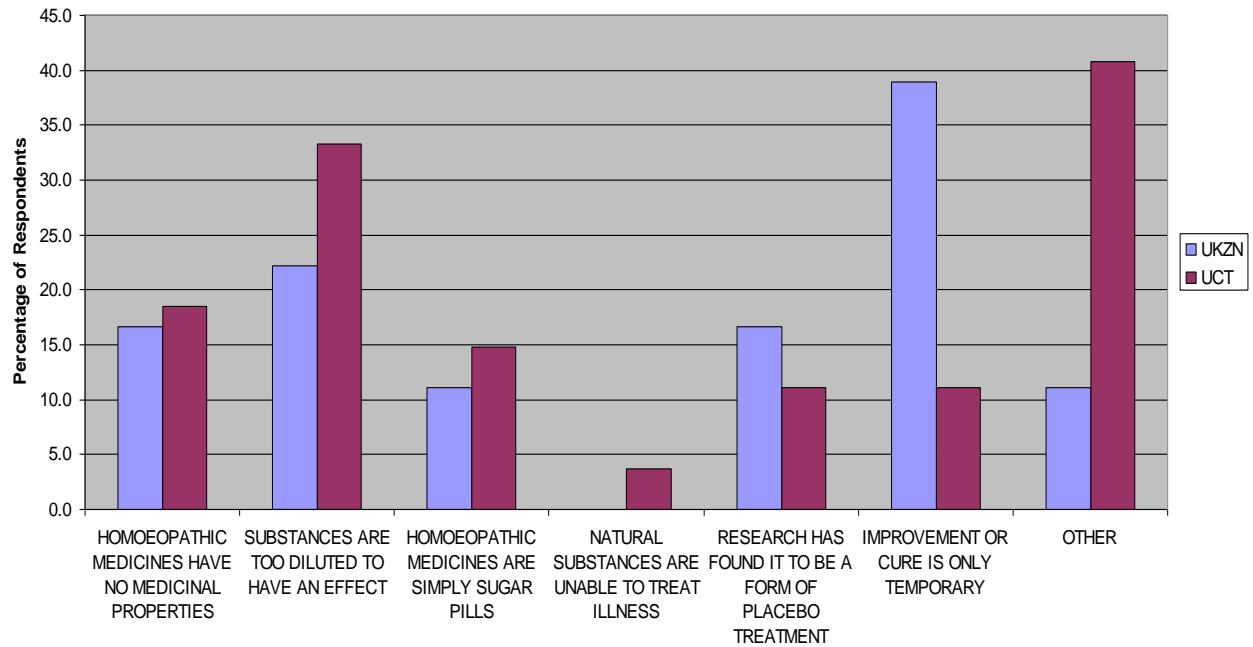


Figure 4.36 Question 19: If you answered 'YES' to the above question, which statements best explain your reasoning? (by university)



Figures 4.35 and 4.36 show that the most prevalent reasons for believing homoeopathy to be a form of placebo treatment are the high dilution of homoeopathic remedies, and a perception that cure is only temporary. These are discussed further in Chapter 5. Correlation analysis reveals a very weak correlation between factors (see Table 4.6). UCT respondents were more likely than UKZN respondents to believe homoeopathy to be a placebo. UKZN respondents were more likely to be unsure or believe it to not be a form of placebo.

Of the respondents who commented 'other', 11 specified their reasoning:

- 9 felt that homoeopathy is based on the placebo effect. Five of these 9 respondents also felt that all forms of treatment are to some degree due to the placebo effect.
- It works on a psychological basis.
- There has been no scientific evidence to support the outcomes of homoeopathic therapy.

Figure 4.37 Question 20: Do you believe that the public generally accepts homoeopathy as a form of medical treatment?

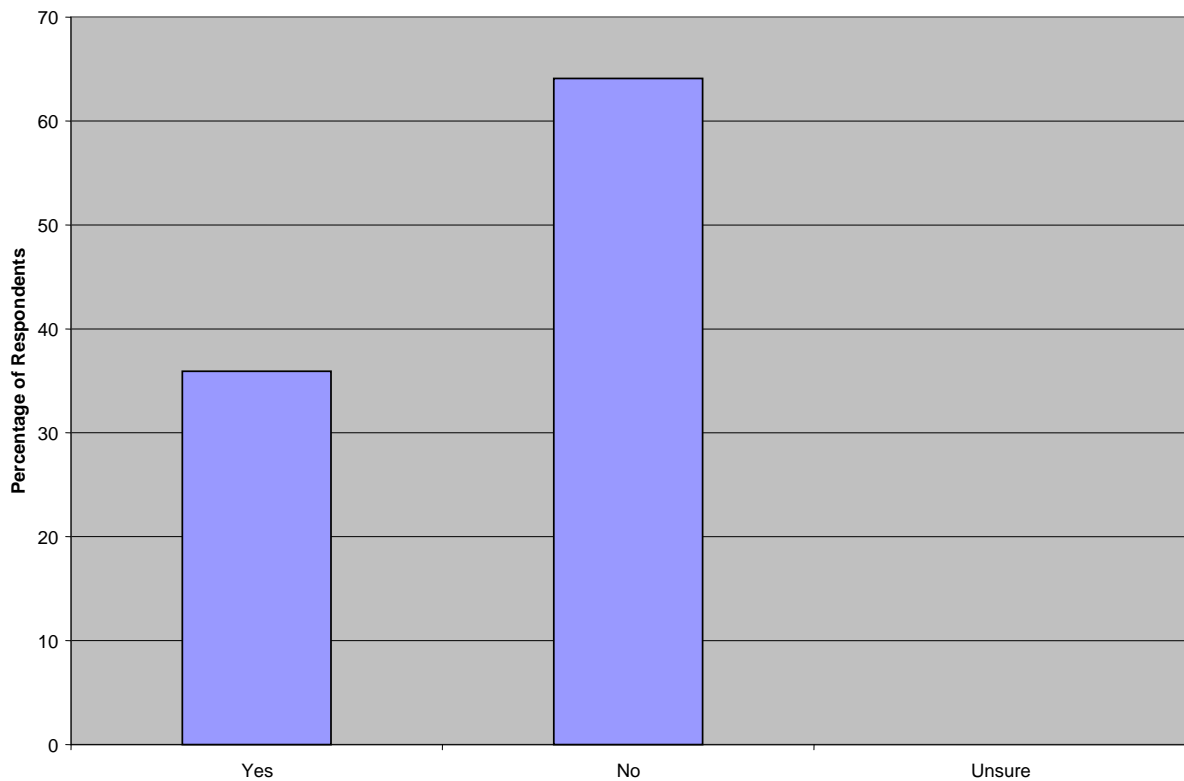
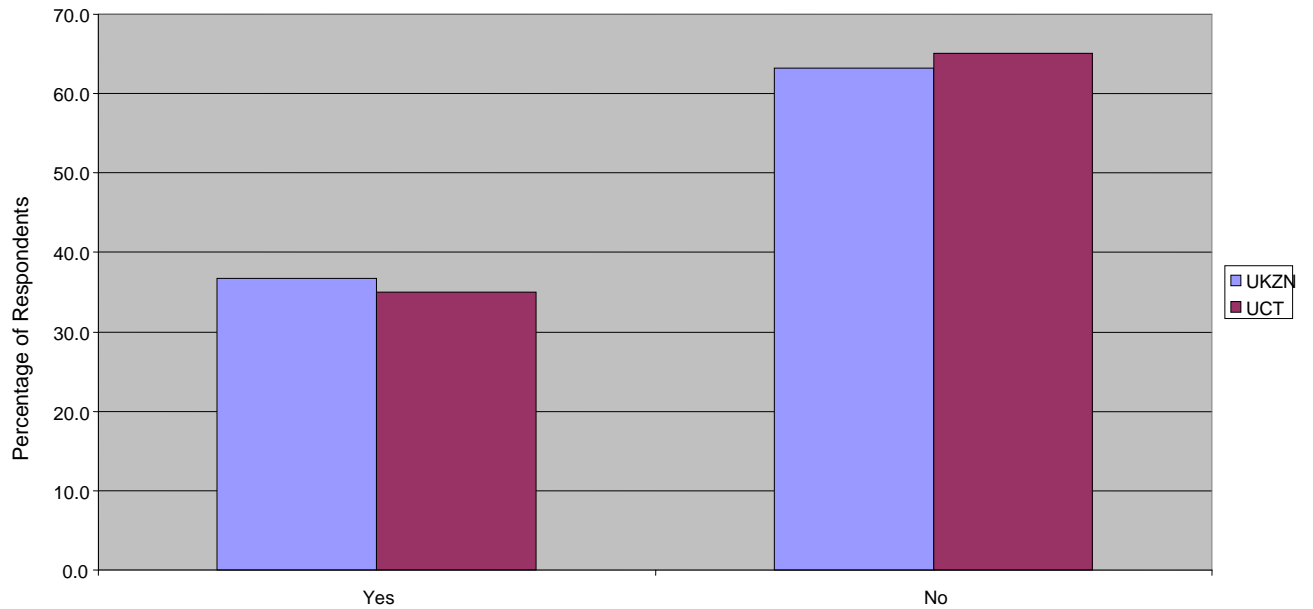


Figure 4.38 Question 20: Do you believe that the public generally accepts homoeopathy as a form of medical treatment? (by university)



Figures 4.37 and 4.38 show that the majority of respondents do not believe that the public accepts homoeopathy as a form of medical treatment, with both universities reflecting similar results.

Figure 4.39 Question 21: If 'NO', mark the blocks you believe provides the best reasons why homoeopathy is not accepted

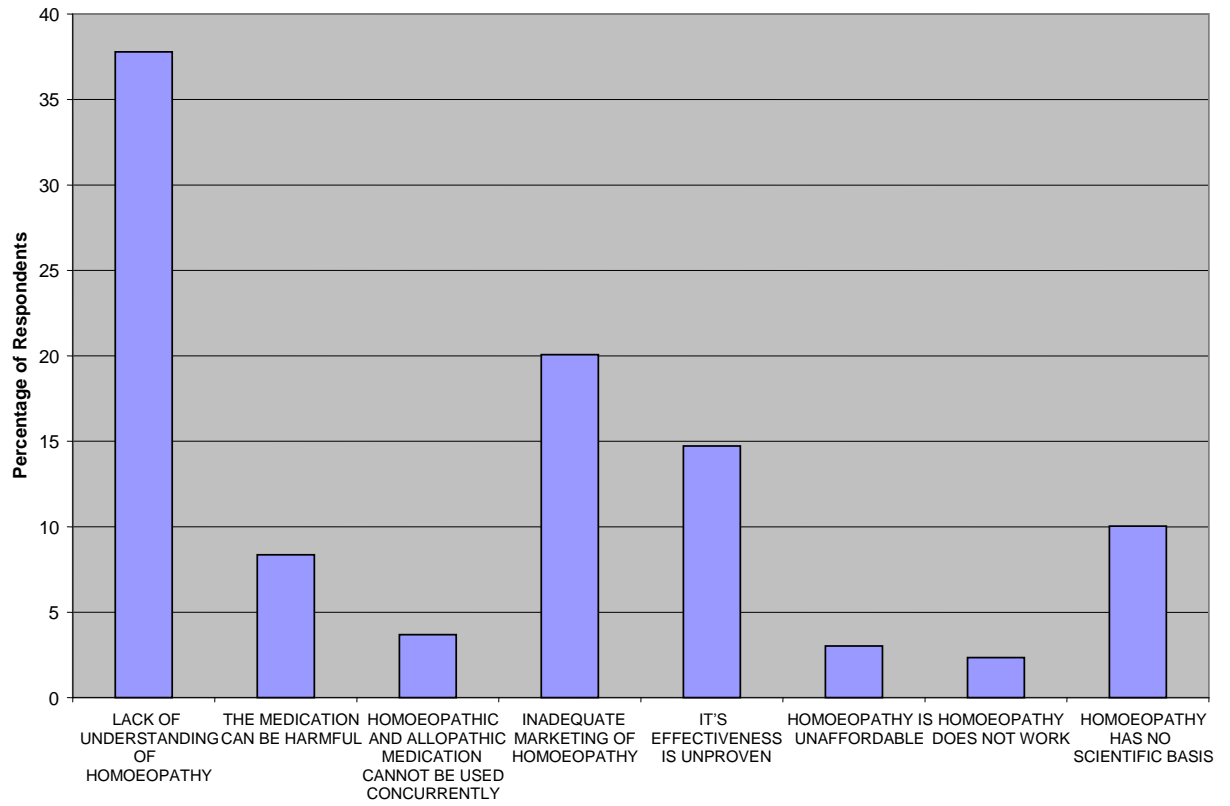
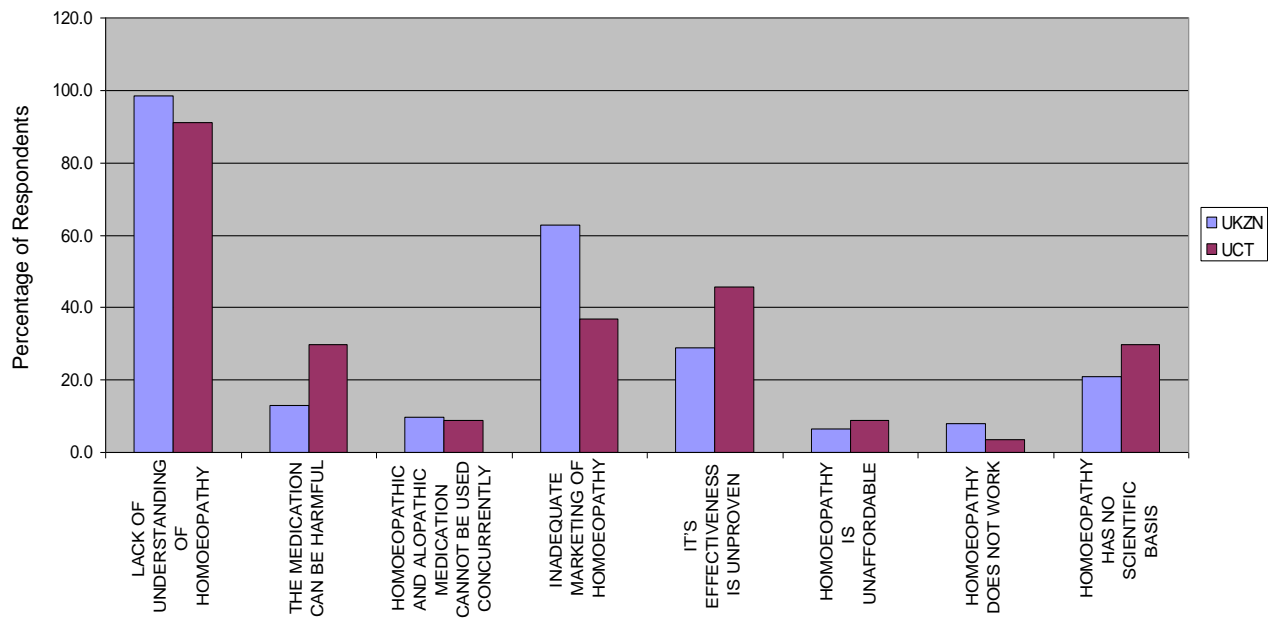


Figure 4.40 Question 21: If 'NO', mark the block that you believe provide that best reasons why homoeopathy is not accepted (by university)



Figures 4.39 and 4.40 show that the most common reason, as perceived by the respondents for the public not accepting homoeopathy as a form of medical treatment, is 'lack of understanding of homoeopathy'.

Figure 4.41 Question 22: What kind of procedures would you expect a homoeopath to be able to and/or perform on his/her patient?

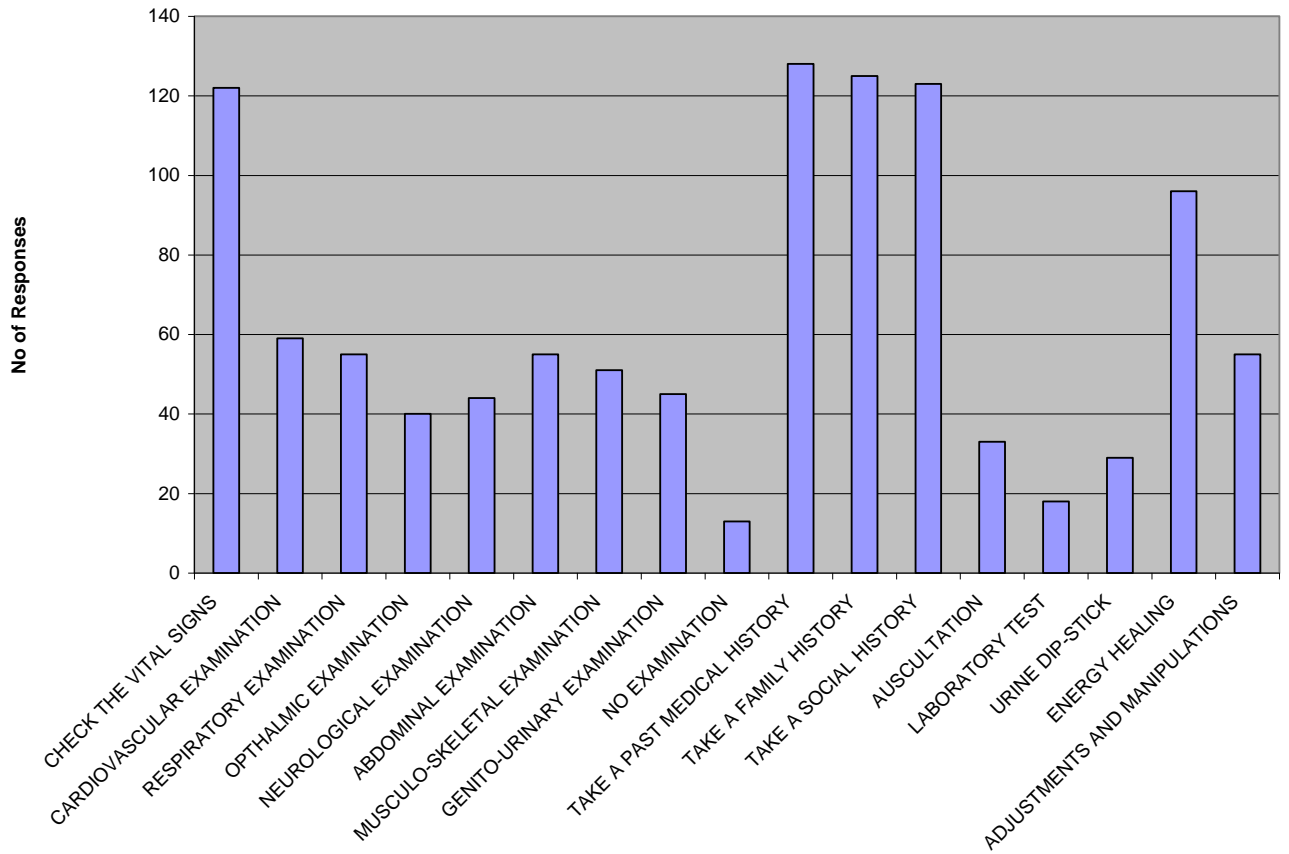
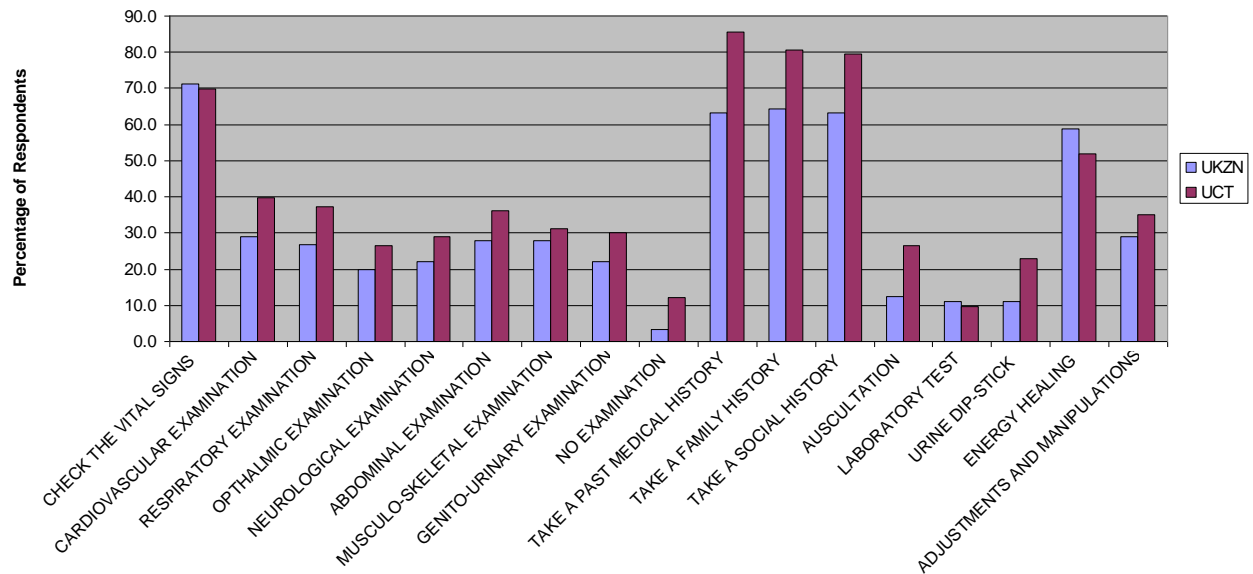


Figure 4.42 Question 22: What kind of procedures would you expect a homoeopath to be able to and/or perform on his/her patient? (by university)



The responses in Figures 4.41. and 4.42 can be divided into three categories:

- Low-level (below 40 responses - no examination, auscultation, dipstick and laboratory tests).
- Mid-level (between 40 and 80 responses - all the system examinations and manipulations).
- High-level (above 80 responses - vital signs, past medical history, family history, social history, and energy healing).

It is interesting to note that more respondents think that a homoeopath should be able to adjust/manipulate than take a urine dipstick. This could be due to confusion arising from knowledge that homoeopaths and chiropractors train in the same university programme.

Figure 4.43 Question 23: Homoeopathic treatment may be useful in which of the following complaints?

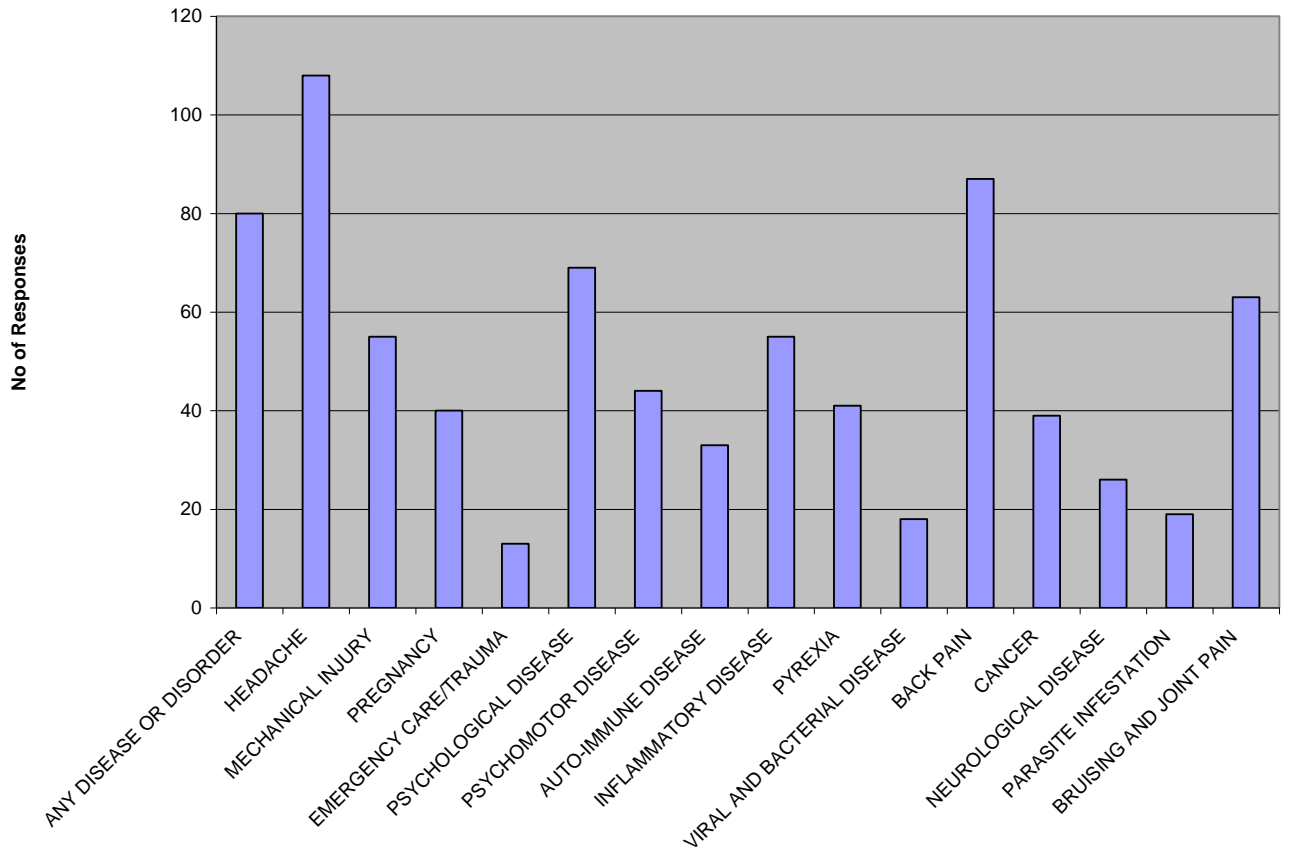
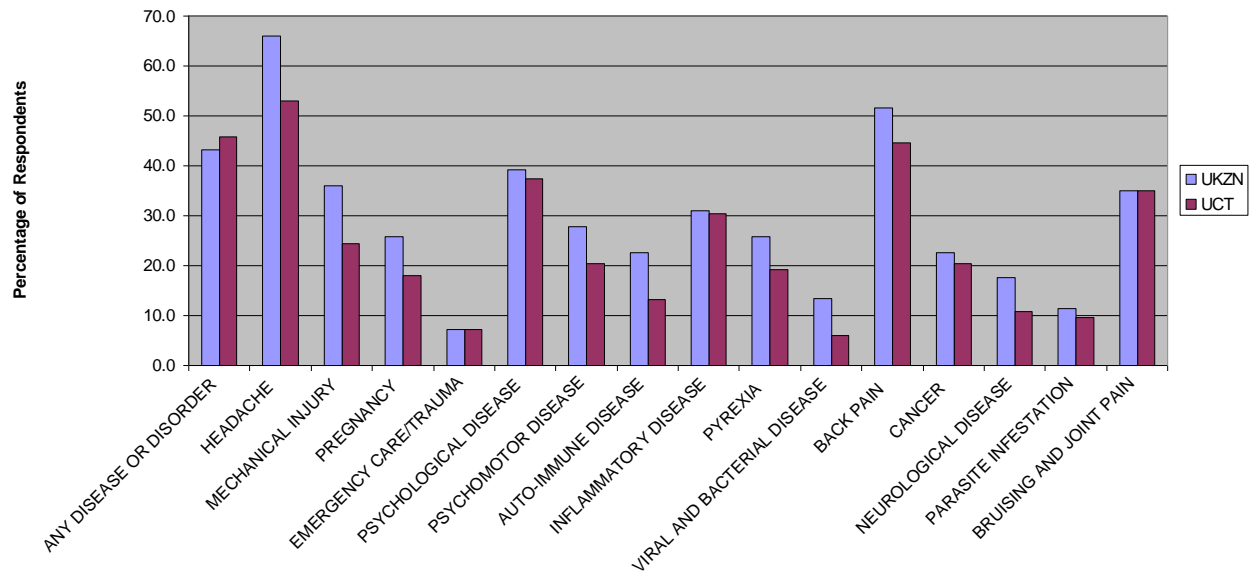


Figure 4.44 Question 23: Homoeopathic treatment may be useful in which of the following complaints? (by university)



From Figures 4.43 and 4.44, it can be seen that the three lowest level responses (emergency care and trauma, viral and bacterial disease and parasite infestation) reflect the perception that a clear bio-medical cause (e.g. parasite, virus, bacteria or trauma) is unsuitable for treatment by homoeopathy. This is not necessarily a reflection on the seriousness of the disease that homoeopaths can treat, considering that more respondents felt homoeopathy might be useful in the treatment of cancer than in parasite infestation.

Further points are that a large number of respondents felt homoeopathy could be useful in the treatment of any disease.

Headache and back pain are the most frequent responses. The latter may again possibly reflect a slight confusion between homoeopathy and chiropractic.

Figure 4.45 Question 24: Do you believe that homoeopathic medications can cause side-effects?

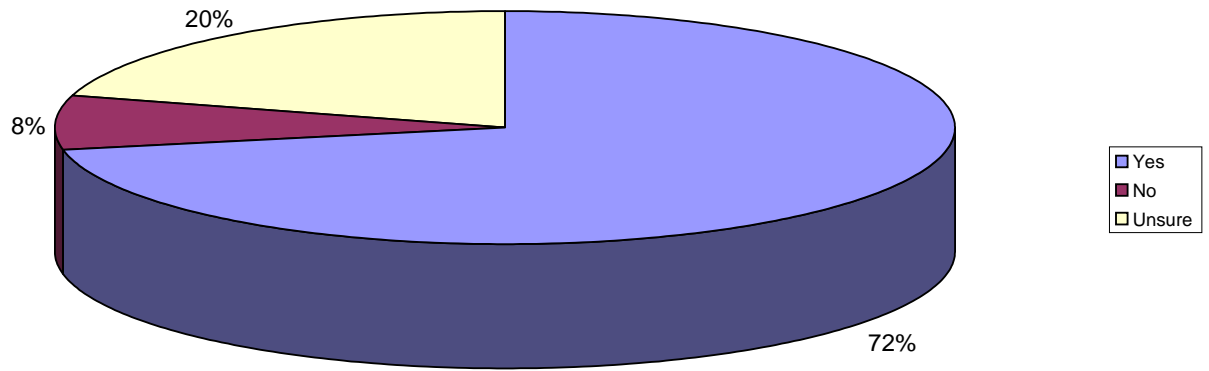
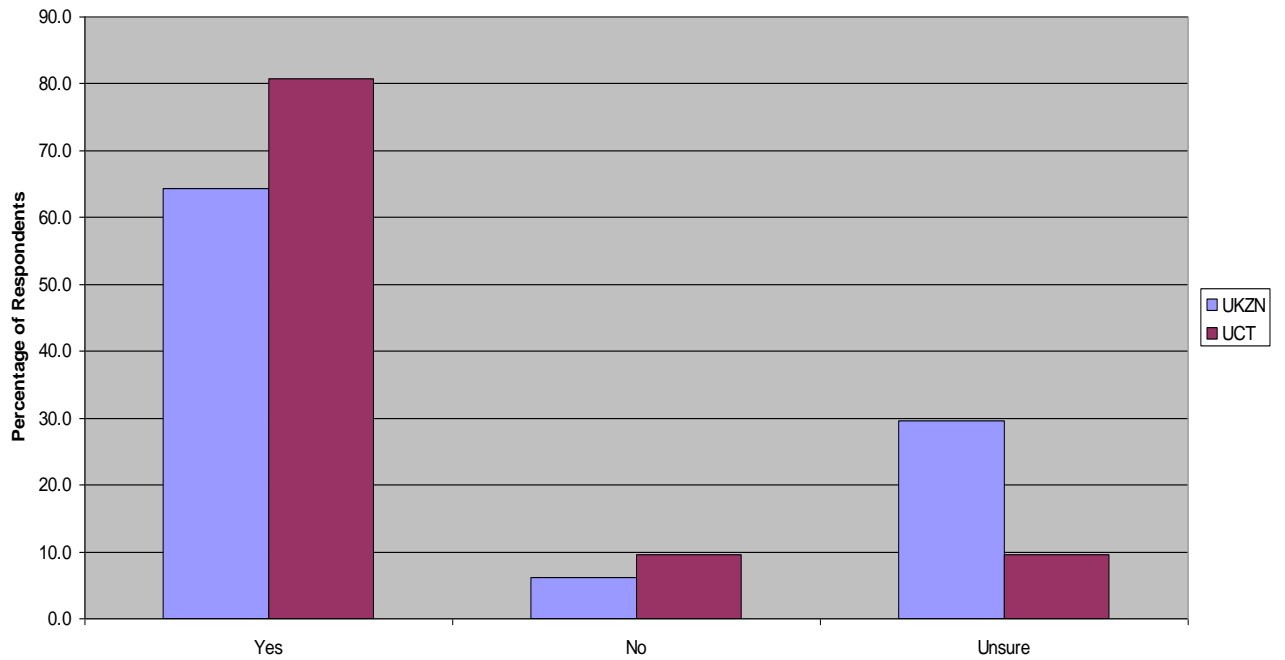


Figure 4.46 Question 24: Do you believe that homoeopathic medications can cause side-effects? (by university)



Figures 4.45 and 4.46 show that the vast majority of respondents were of the view that homoeopathic medications can cause side effects. This is surprisingly high, and possibly reflects a lack of basic knowledge of the effect of homeopathic medicines.

Figure 4.47 Question 25: Do you believe that when taking prescription medicine there is greater risk, similar risk or less risk of suffering from side-effects compared to taking homoeopathic medication?

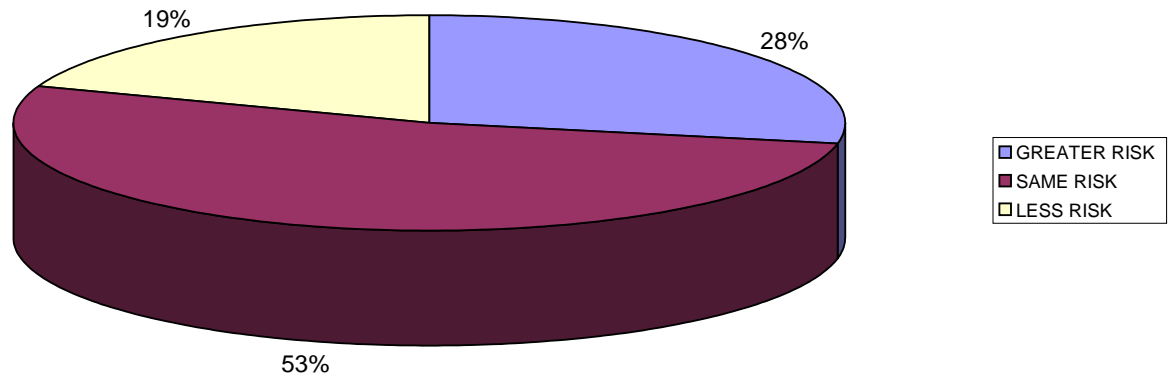
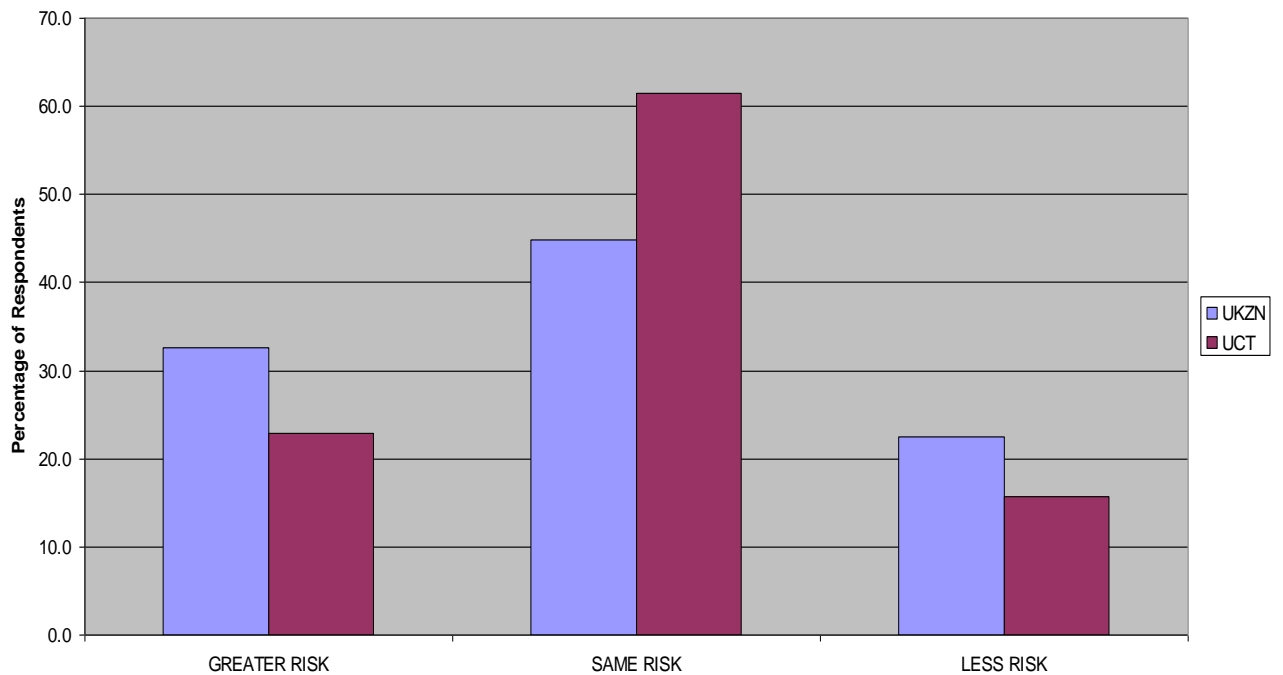


Figure 4.48 Question 25: Do you believe that when taking prescription medicine there is greater risk, similar risk or less risk of suffering from side-effects compared to taking homoeopathic medication? (by university)



Figures 4.45, 4.46, 4.47, and 4.48 reflect a perception that homoeopathy is a serious form of treatment and as such has risks associated. Further exploration would be needed before conclusions could be drawn on the accuracy of this perception. This will be discussed in Chapter 5 (comparison between side effect and aggravation in evaluating the accuracy of this perception).

Figure 4.49 Question 26: Mark the box that you believe best describes a homoeopathic medicine

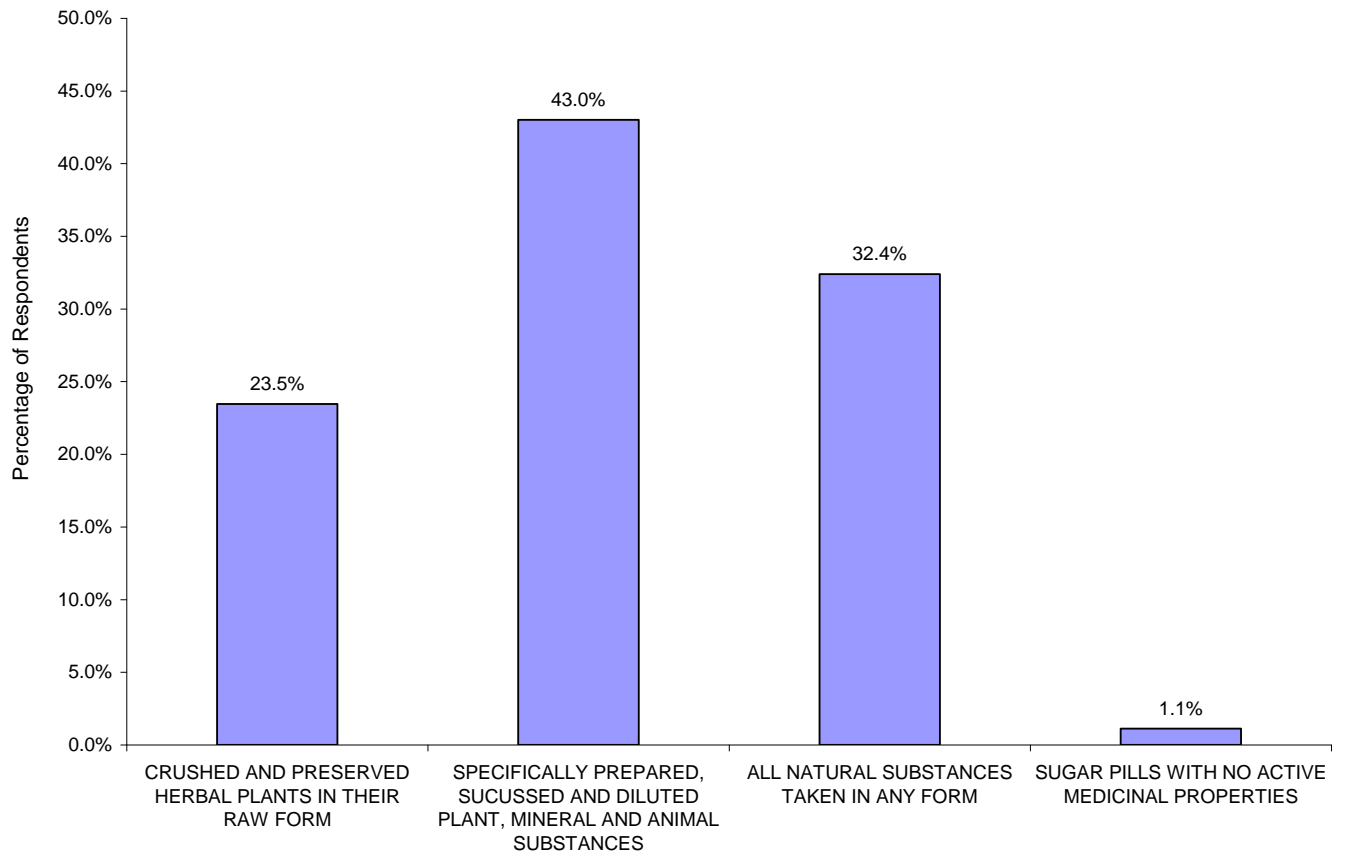
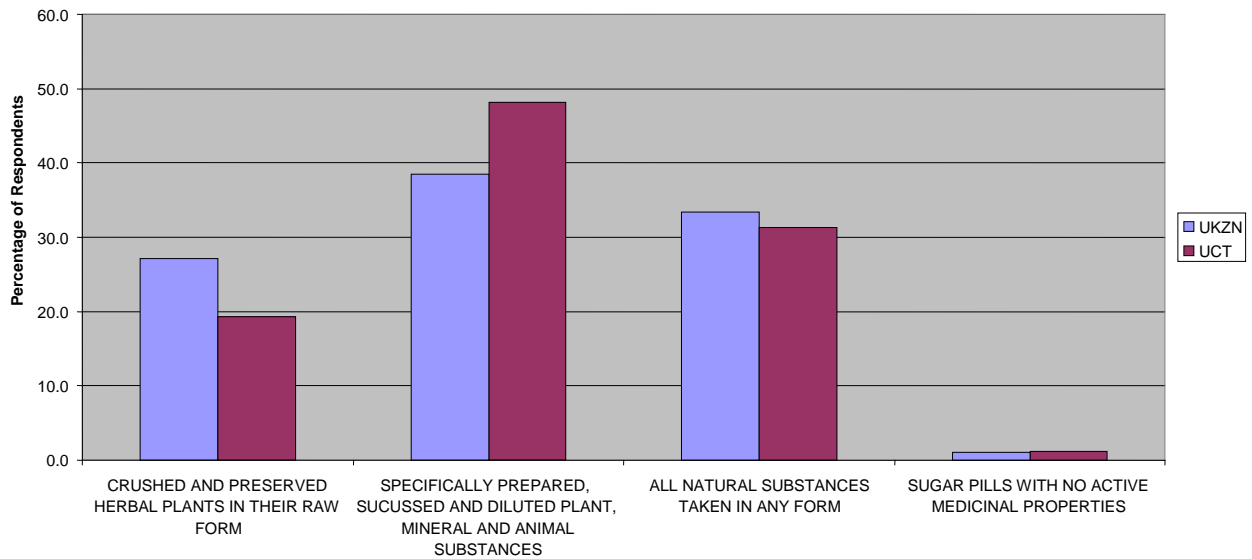


Figure 4.50 Question 26: Mark the box that you believe best describes a homoeopathic medicine (by university)



Figures 4.49 and 4.50 reflect the common confusion between homoeopathy and herbalism. This perception reinforces the perception illustrated in Figure 4.31 and 4.32 in which herbal medicines are the second highest response for what studying homoeopathy entails.

Interesting to note is the low level (1.1%) of respondents who felt sugar pills to be the nature of homoeopathic medicine. This contrasts with the earlier results (Figures 4.25 and 4.26) which show roughly 10% of respondents feeling that homoeopathy lacks a scientific basis due to the placebo effect.

Figure 4.51 Question 27: Do you believe homoeopathic medicine is....

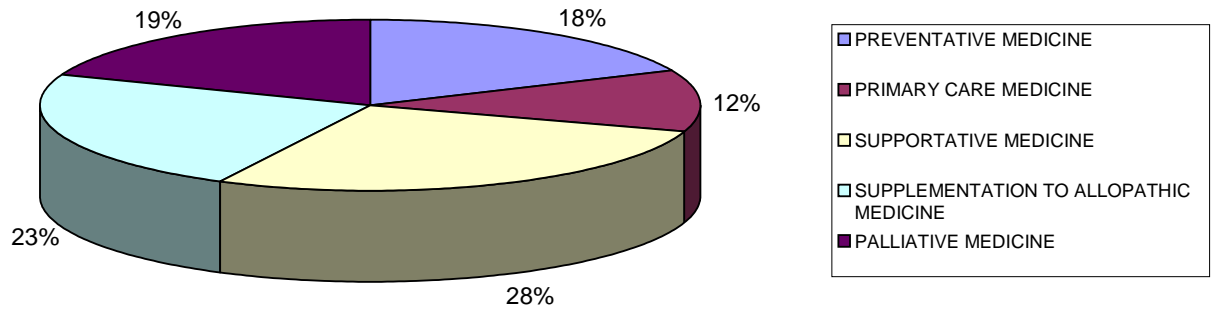
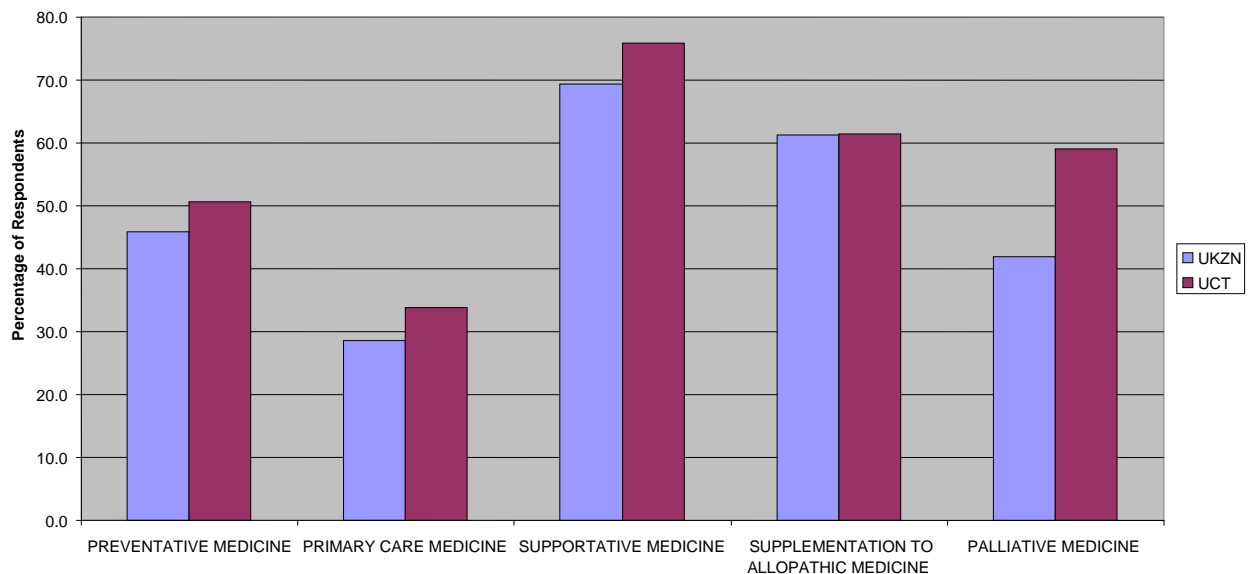


Figure 4.52 Question 27: Do you believe homoeopathic medicine is....(by university)



Figures 4.51 and 4.52 show respondents were fairly evenly split between the options. There was a slight preponderance of respondents who felt homoeopathy to be mainly supportive medication.

Only 12 % felt it to be primary care medicine. This is in line with Figure 4.43 and 4.44 above in which the causation of a problem was a major factor in perceptions of whether homoeopathy was useful or not.

Figure 4.53 Question 28: Is there a difference between homoeopathy and....

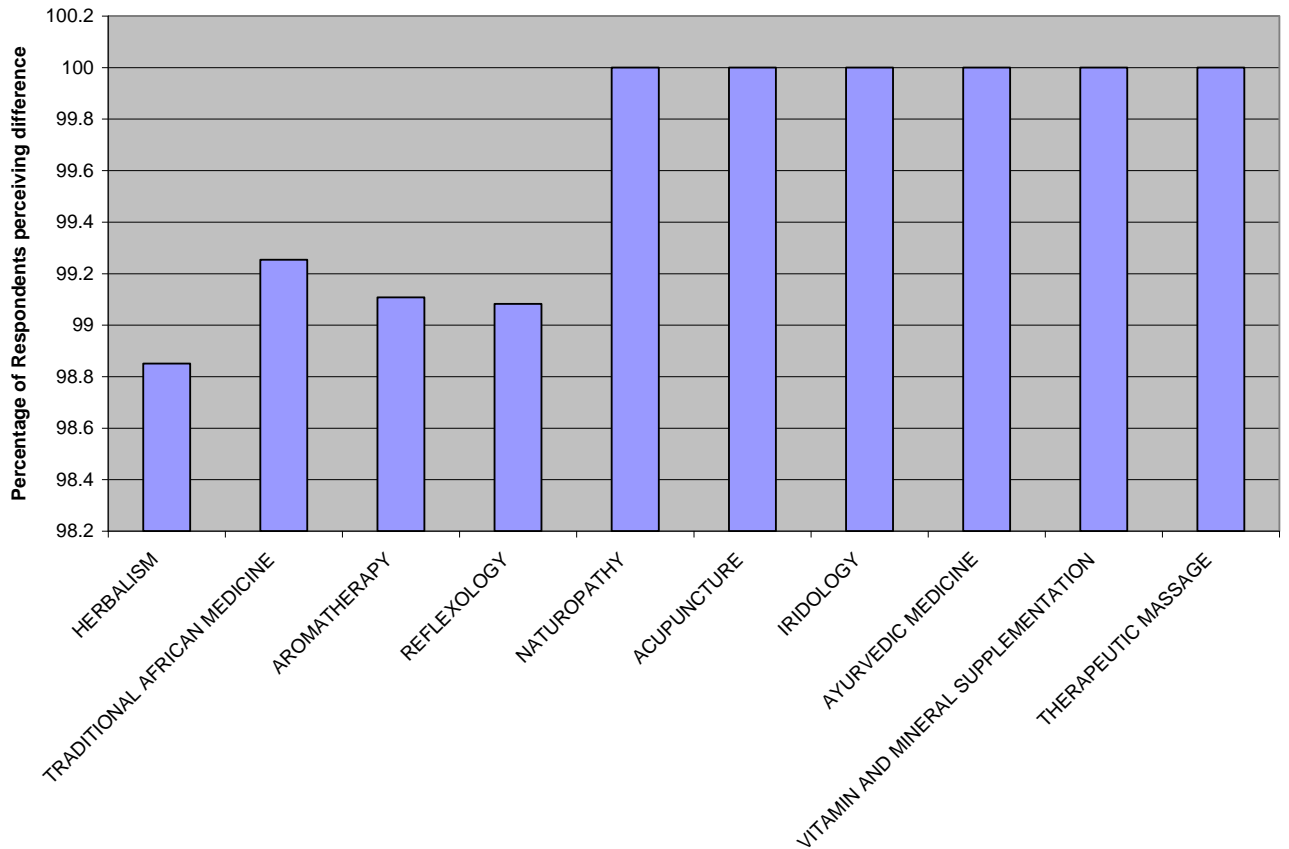
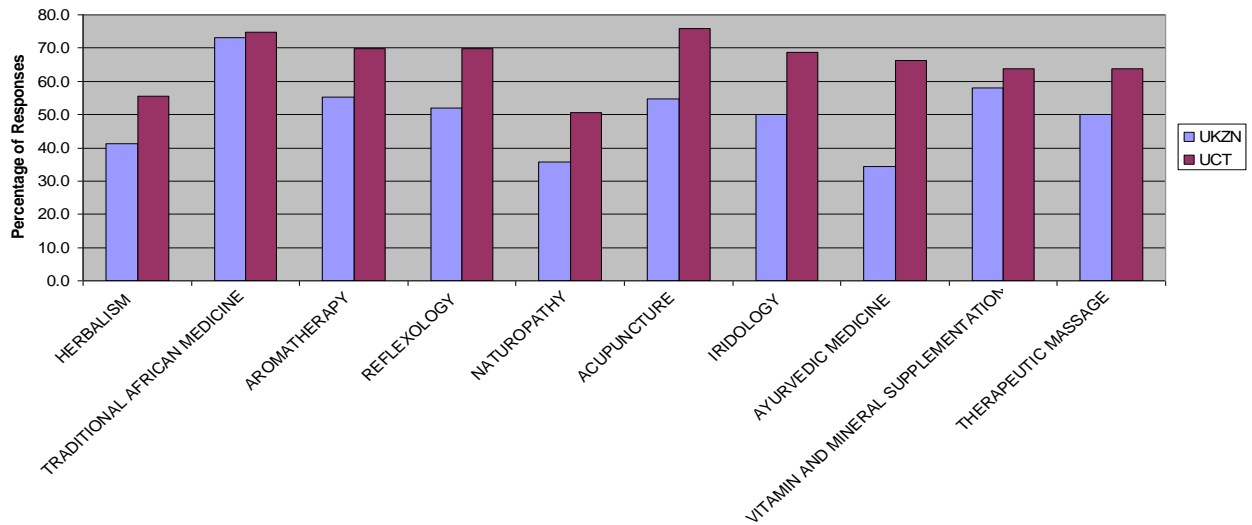


Figure 4.54 Question 28: Is there a difference between homoeopathy and....(by university)



Figures 4.53 and 4.54 reflect the predominant misapprehensions regarding homoeopathy. Herbalism is the least differentiated of the list, which is in line with the results illustrated in Figures 4.31, 4.32, 4.49 and 4.50. The relatively high level of differentiation between homoeopathy and the other alternative modalities could possibly be due to the nature of the question i.e. if a question is being asked then there must be a difference.

Another point worth noting is that the least differentiated of the alternative systems are also the least defined. This is evident in the difference between the responses between naturopathy (100% perceived a difference) and herbalism (98.8% perceived a difference). Traditional African medicine, aromatherapy and reflexology likewise are not well defined as systems. It is surprising to note that homoeopathy is perceived to have more in common with traditional African medicine than with naturopathy and vitamin and mineral supplementation.

Figure 4.55 Question 29: Do you believe a homoeopath is a skilled primary care practitioner?

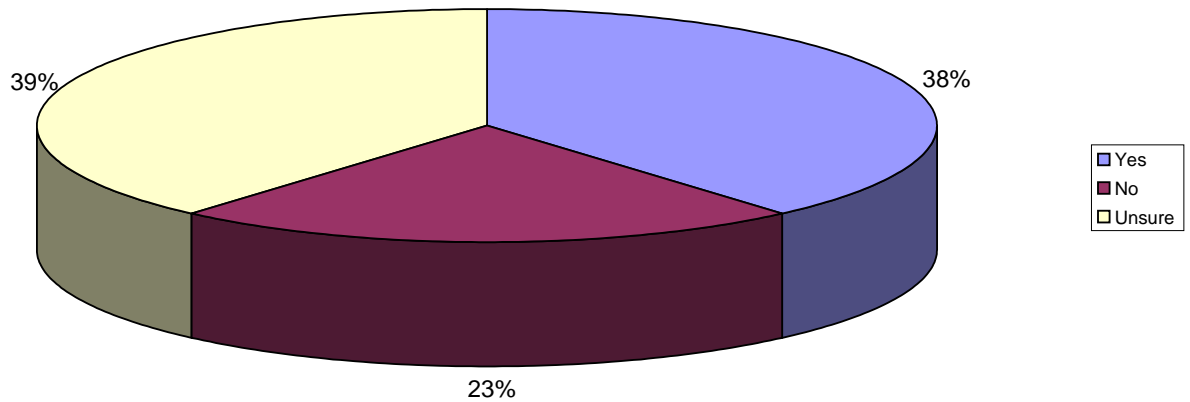
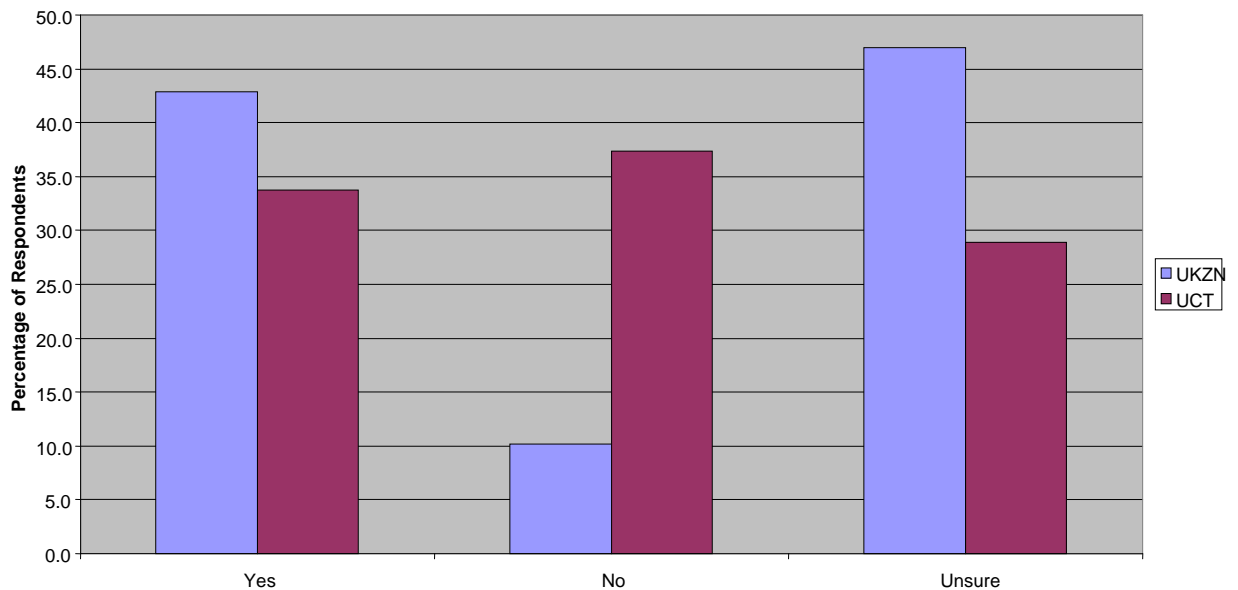


Figure 4.56 Question 29: Do you believe a homoeopath is a skilled primary care practitioner? (by university)



It is evident from Figure 4.56 that the largest response was in the “Unsure” category. This may reflect lack of knowledge of homoeopaths and how they practice. Correlation analysis reveals that there is a weak correlation between

factors. UCT respondents were most likely to feel homoeopaths to not be skilled primary care practitioners.

Figure 4.57 Question 30: Do you believe homoeopathy could be incorporated into hospital care?

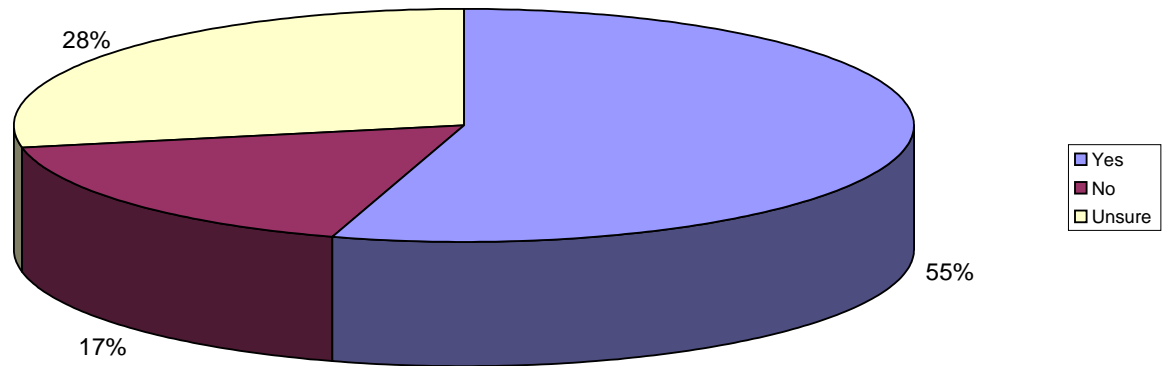
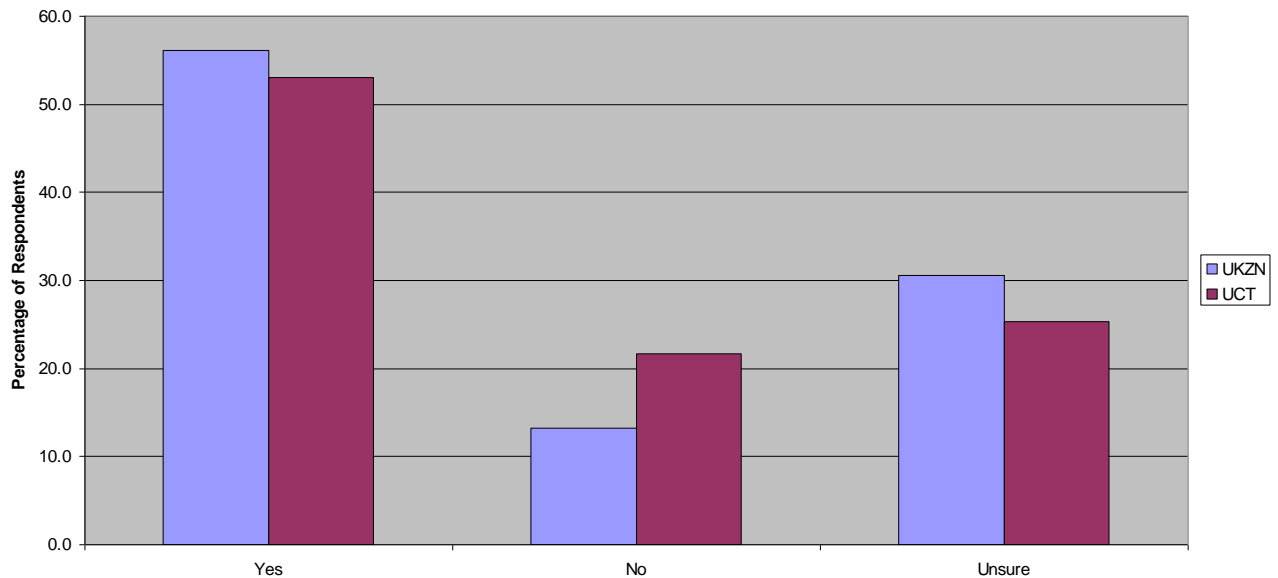
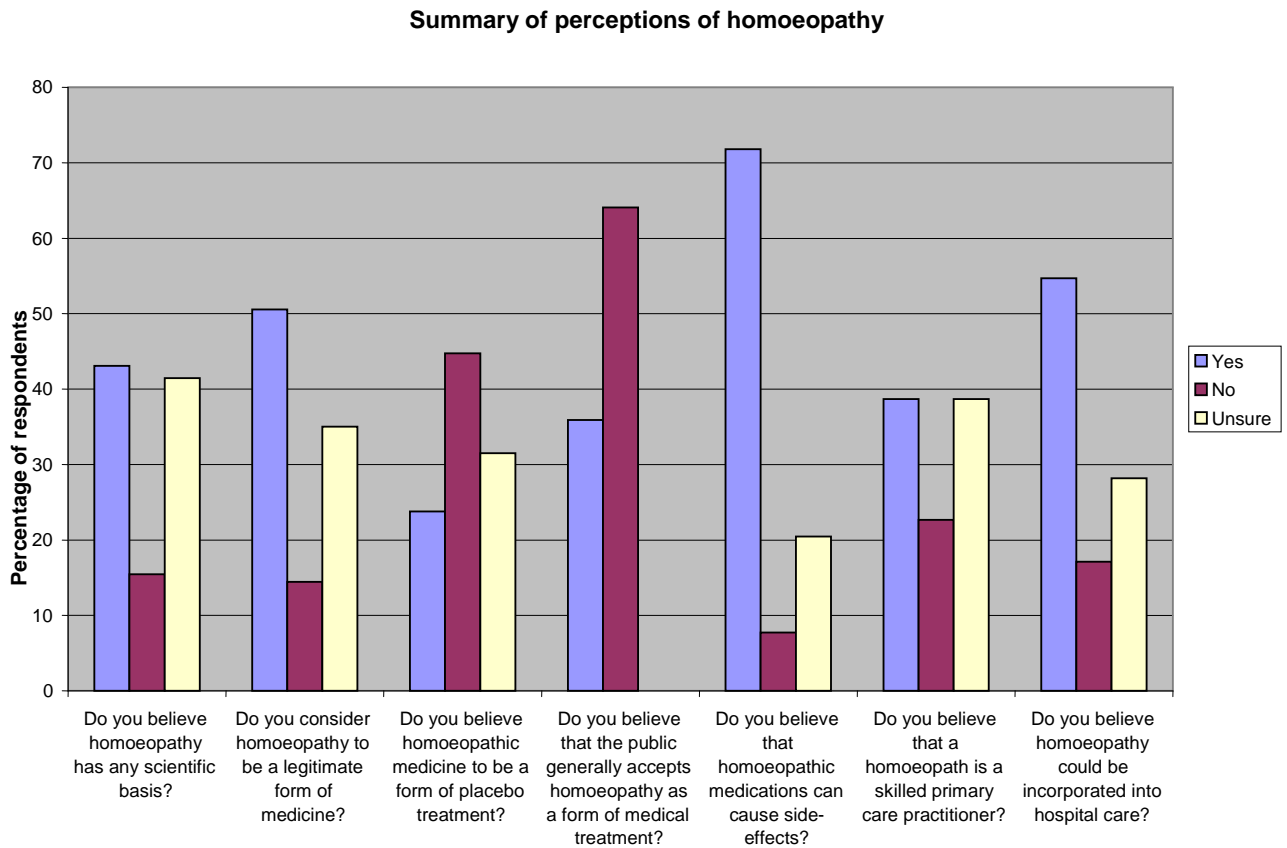


Figure 4.58 Question 30: Do you believe homoeopathy could be incorporated into hospital care? (by university)



It is evident from Figures 4.57 and 4.58 that the majority of respondents felt that homoeopathy could be useful as part of a hospital care paradigm. This could reflect on a perception of homoeopathy as a useful tool in the core areas of hospital care (reducing mortality and morbidity, decreasing recovery time etc) or a perception of homoeopathy as a soft option (e.g. reflexology and therapeutic massage) to be used to enhance the overall hospital experience without necessarily being part of the core functions. Further research would be needed to differentiate between the two perspectives.

Figure 4.59 Summary of perceptions of homoeopathy



The overview in Figure 4.59 suggests an overall 'positive' perception of homoeopathy. The majority of respondents felt that homoeopathy is a legitimate form of medicine, with some scientific basis. Most did not ascribe the homoeopathic effect to placebo and further felt that homoeopathic medication can cause side effects. Most also felt that homoeopathy could be incorporated into the hospital care system. This indicates a perception of homoeopathy as a legitimate, scientific and serious form of medicine.

Most respondents also felt that homoeopathy is not accepted as above by the general public. Possible reasons for this will be explored in Chapter 5.

4.4.4 Part Four: Communication (Questions 31 – 37)

These comprised descriptions of central tendency and distribution frequencies for the data relating to the respondents attitudes towards interdisciplinary communication.

Figure 4.60 Summary of respondents' attitudes to interdisciplinary communication between homoeopaths and general practitioners

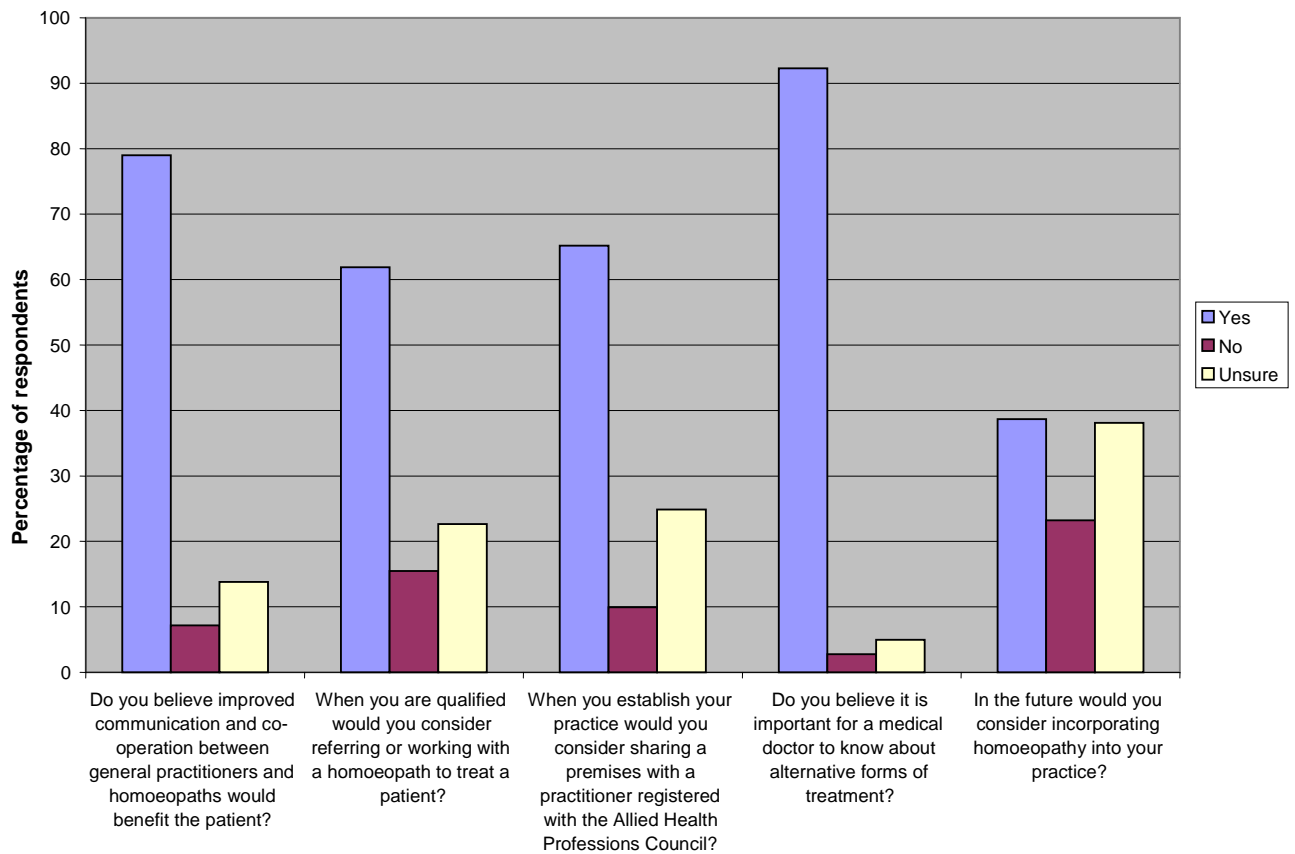


Figure 4.60 further reflects the perception that the general level of non-specific interest is high. Most respondents feel that it is important for medical practitioners to know about alternative forms of treatment. Both referral to and sharing premises with a homoeopath are seen in a positive light, and most view improved communication between homoeopaths and general practitioners as benefiting the patient. Supporting this view is the fact that in every case the number of “Unsure” responses is higher than the “No” responses. Incorporating homoeopathy into practice is less positively viewed, but the number of respondents who would consider it is still relatively large (38%).

Figure 4.61 Question 31: Do you believe improved communication and co-operation between general practitioners and homoeopaths would benefit the patient? (by university)

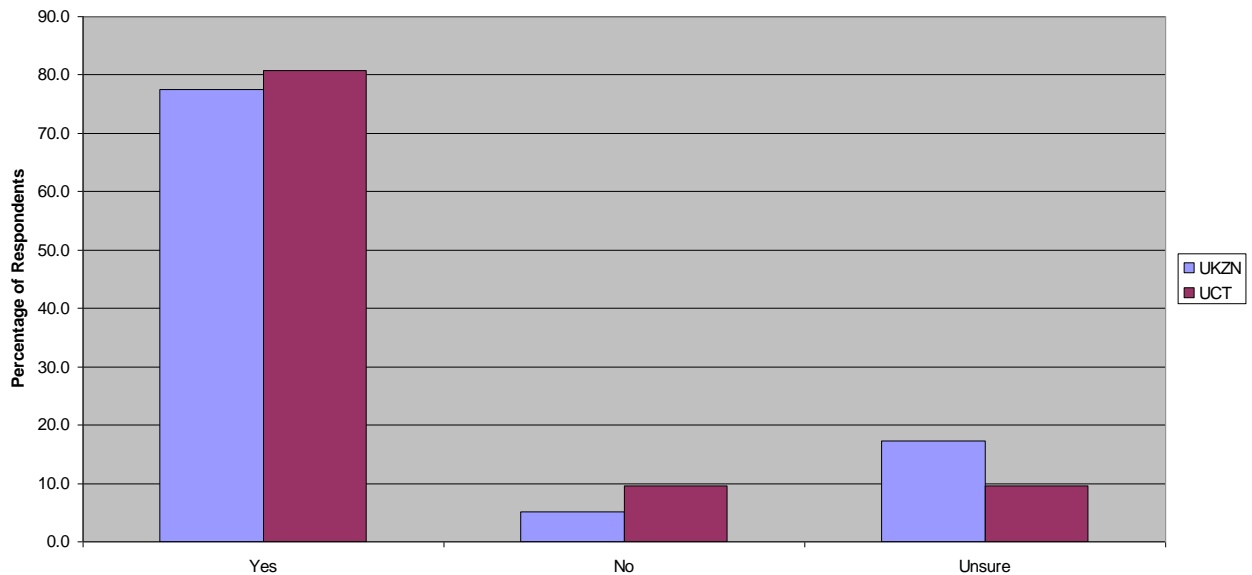
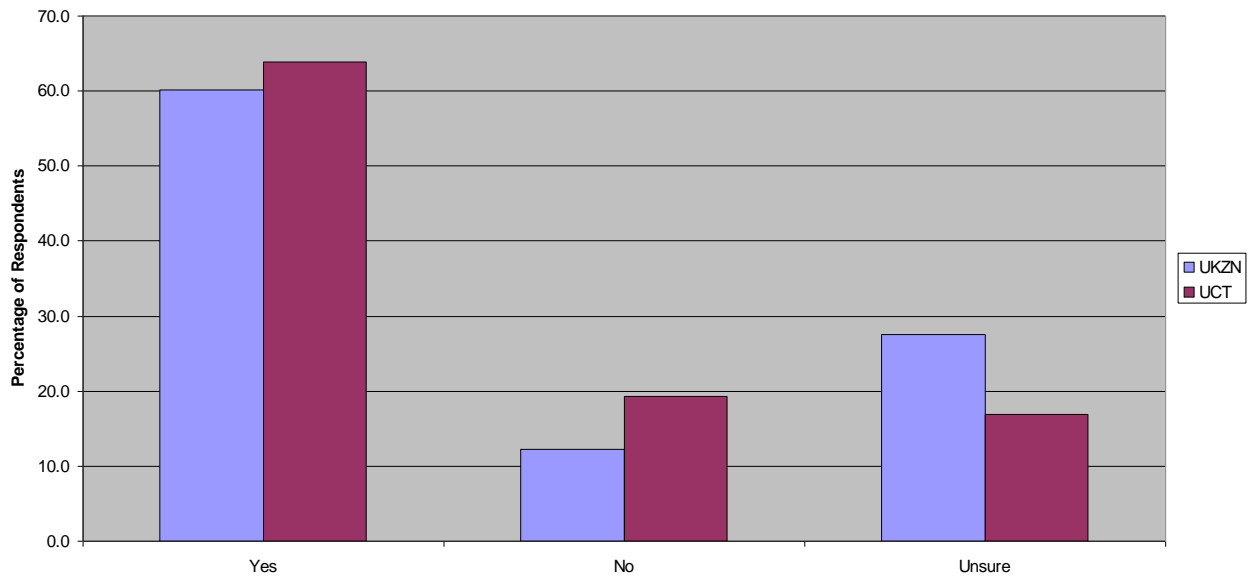


Figure 4.61 shows that the vast majority of respondents from both universities were in favour of improved communications.

Figure 4.62 Question 32: When you are qualified would you consider referring to or working with a homoeopath to treat a patient? (by university)



It is interesting to note from Figure 4.62 that the majority of respondents from both universities would be prepared to consider referring to or working with homoeopaths.

Figure 4.63 Question 33: When you establish your practice would you consider sharing premises with a practitioner registered with the Allied Health Professions Council? (by university)

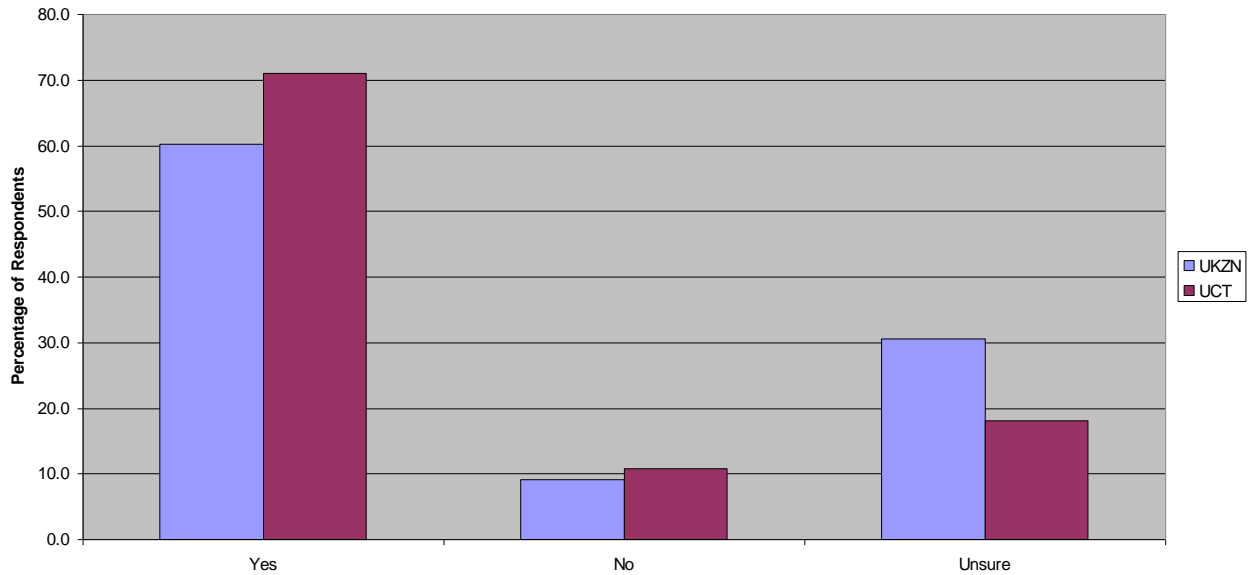


Figure 4.63 also reflects a positive perception by respondents regarding cooperation and collaboration with homoeopaths.

Figure 4.64 Question 34: Do you believe it is important for a medical doctor to know about alternative forms of treatment? (by university)

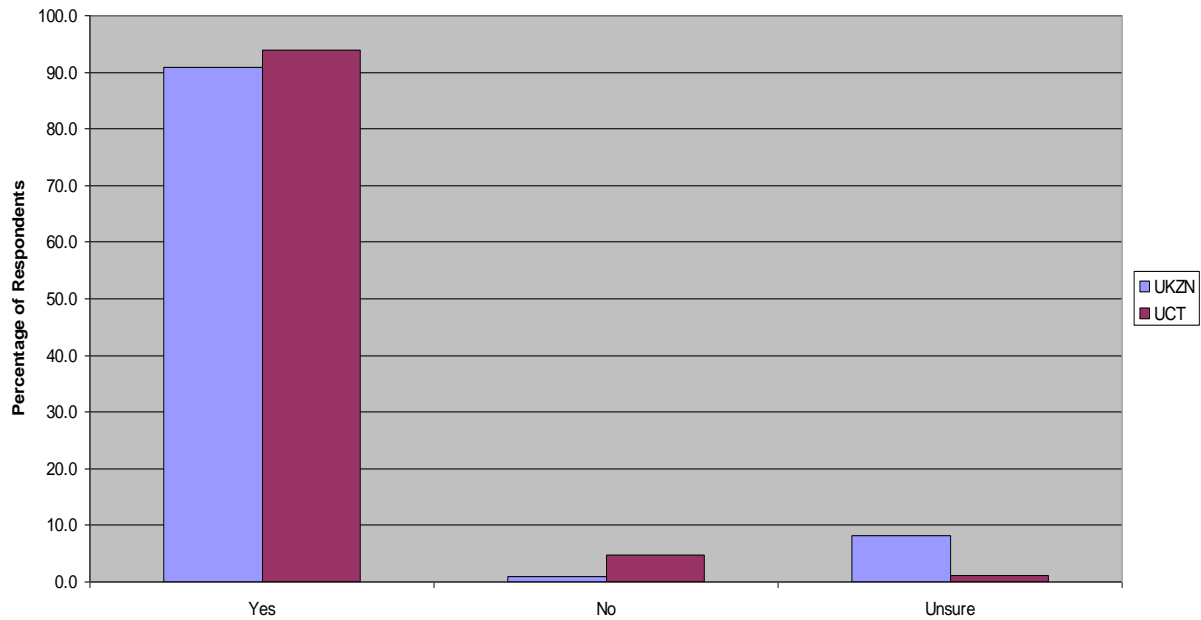


Figure 4.64 shows that the vast majority of respondents were in favour of medical doctors increasing their knowledge of alternative forms of treatment. Correlation analysis reveals that there is a very weak correlation between factors (see Table 4.7). UCT respondents were more likely than UKZN respondents to feel that it is not important for a GP to know about alternative forms of treatment.

Figure 4.65 Question 35: In the future would you consider incorporating homoeopathy into your practice? (by university)

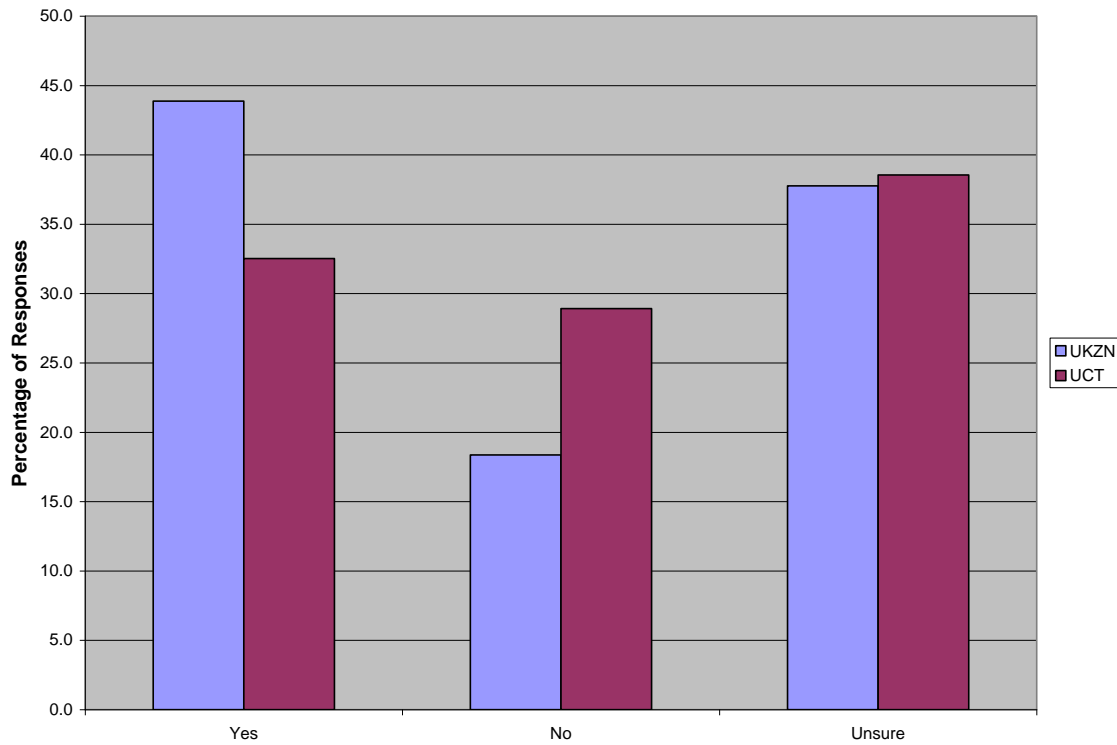


Figure 4.65 shows that more respondents (38% as per Figure 4.60) are willing to incorporate homoeopathy into their practice than are not willing to (23% as per Figure 4.60). Furthermore, it is evident that UKZN respondents were more willing than UCT respondents to do so.

Figure 4.66 Question 36: If a medical doctor wants to prescribe homoeopathic medicines effectively what training do you believe they require?

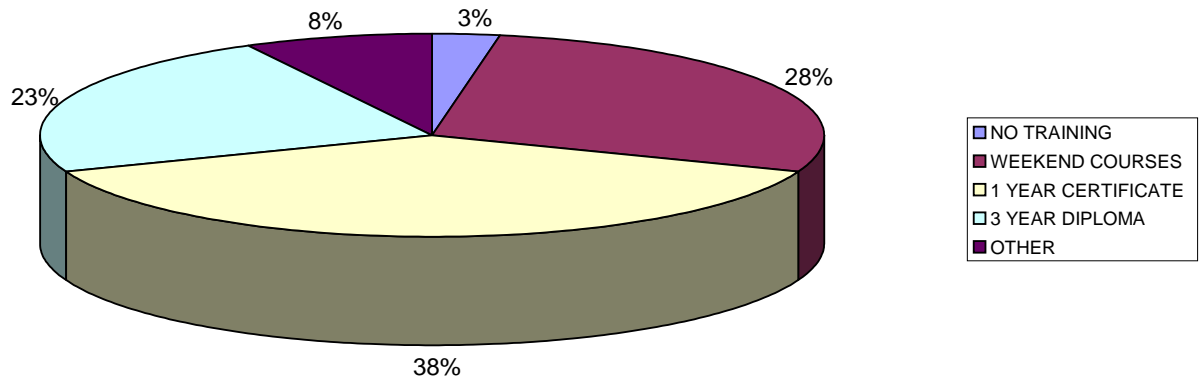
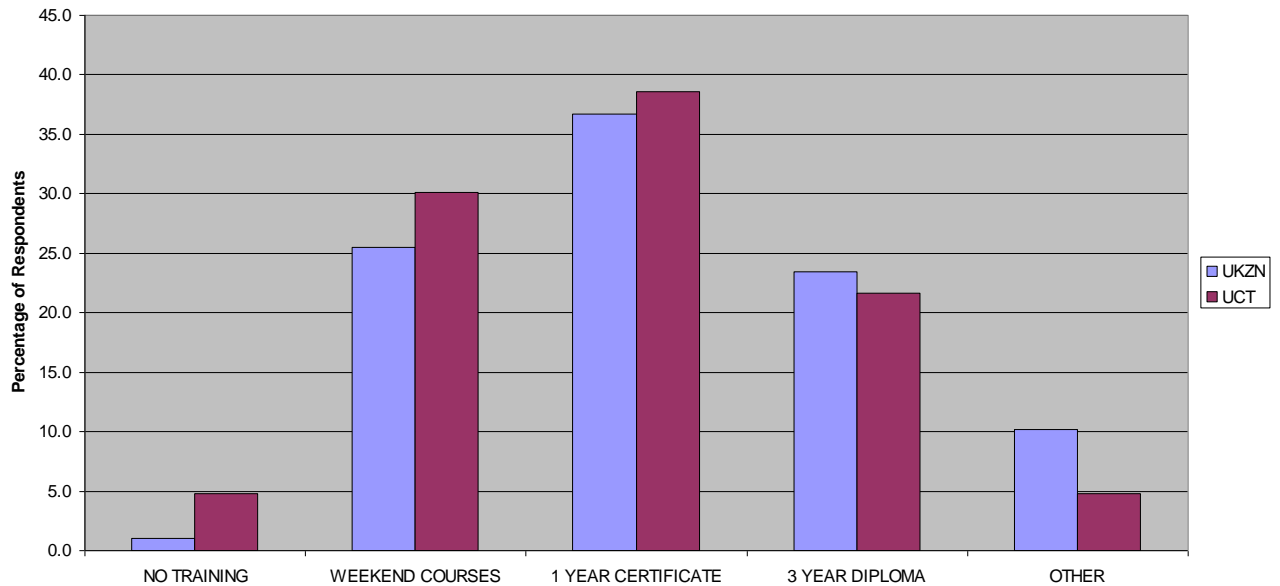


Figure 4.67 Question 36: If a medical doctor wants to prescribe homoeopathic medicines effectively what training do you believe they require? (by university)



Figures 4.66 and 4.67 show that the majority of respondents (61%) recognise that a fairly involved training course is necessary to be able to prescribe homoeopathic remedies effectively. This reflects the perception that homoeopathy is a serious discipline.

There were 15 respondents who commented 'other', of these 9 specified their answer:

- It should be a 6 year course
- A Post Graduate course
- The MBChB could include a short course with lectures on homoeopathy to inform the medical students
- Part time courses
- Workshops (not on weekends)
- It should be included in the in service training
- A full course on the information required to be able to prescribe the medicines effectively
- A bridging course over 3 years
- Enough training to make sure that the practitioner knows what they are doing.

Figure 4.68 Question 37: Which of the following best reflects your view of homoeopathy?

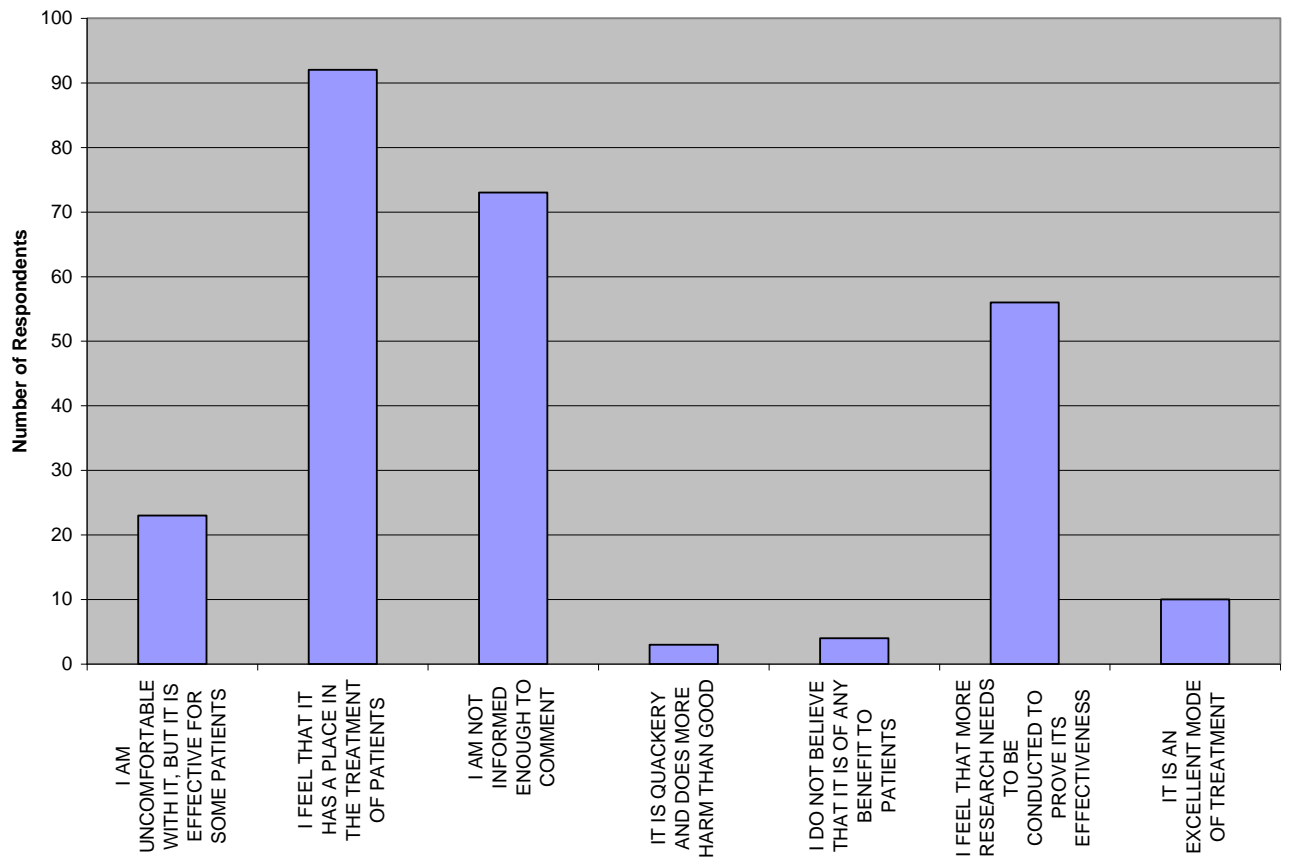
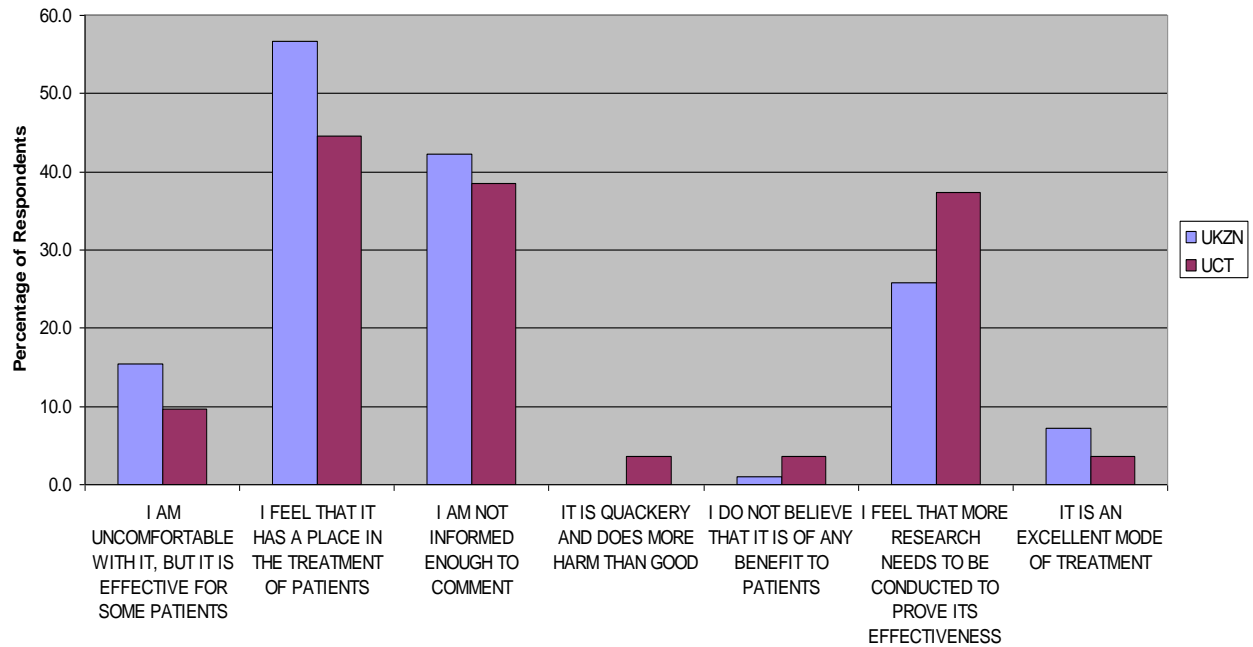


Figure 4.69 Question 37: Which of the following best reflects your view of homoeopathy? (by university)



Figures 4.68 and 4.69 show's that the most common responses demonstrate a balance between cautious optimism and non-committal approval. Outright rejection ('quackery' 'do not believe') is very low.

At the end of the questionnaire the respondents were able to add any comments. Seventeen respondents chose to add comments:

- Homoeopaths hopefully appreciate the role of medical doctors and see the place for and know when to refer a patient with a serious illness/condition, for additional management and investigation. I think the relationship between doctor and homoeopath should be: reciprocal, mutually respectful, complementary (both ways), and co-operation should exist.

- We need to try and inform people about homoeopathy. I believe that most people only know that it exists but are unaware of the content or what it is. This questionnaire is a good start.
- I think homoeopathy is not known and there should be advertising done to inform people about this discipline.
- Medical students need to know more about homoeopathy. It is very interesting and seems very effective.
- There will be a negative response from most medical students. This is because it is a general rule that: 'one will be afraid of something that they do not know'.
- I think there is a need to educate health care providers and the general public on homoeopathy as this will go a long way in ensuring an effective patient-centred holistic care.
- There should be a definition page included in the questionnaire.
- Homoeopathy has its place in society; it has proved effective for many years. There needs to be more funding and resources available to incorporate it into the medical curriculum. This would benefit the medical profession and the patient.
- Homoeopathy does work. The homoeopath is not just concerned with the disease but other aspects of the patient such as their diet.
- Homoeopathic medicines need to be more standardised.
- Questions were hard to answer, need to develop a "Yes" or "No" based questionnaire.

- If the molecules are so diluted, how does it work?
- I am not sure that I know enough to be critical. Homoeopathy does work for some people and as primary care givers we should explore all options to keep people healthy.
- In the past I encountered a homoeopath that ended up prescribing allopathic medication. It was very disappointing. If however, they stay true to their practice, it is a wonderful approach to healing.
- I have considered specialising in homoeopathy after my undergraduate degree. It needs to be incorporated into the medical curriculum. I have met patients who had the most wonderful things to say about the treatment they received from homoeopaths.
- I do not know much about homoeopath but what I do know is that it is useful and would be of benefit to the patient. Patients should be made aware of their options.
- I plan to incorporate it into my practice.

The above comments demonstrate an openness to homoeopathy (even enthusiasm!) which is very encouraging. Two of the students are even considering including homoeopathy into their future practice.

4.5 Correlation analysis

In terms of the Objective (3) described in the Introduction, the relationship between the demographic variables and the responses given was explored. This was done by hypothesis testing using the Phi Correlation Co-efficient and Kendall's Tau Correlation Co-efficient. The level of significance was set at 5% i.e. $p \leq 0.05$.

4.5.1 Hypothesis testing – demographic variables

4.5.1.1 Personal information (Part 1) against Knowledge of homoeopathy (Part 2)

Null hypothesis 1: There was no significant correlation between any of the demographic variables (Part 1 of the Questionnaire i.e. gender, age, ethnic group, university registered at) and their knowledge of homoeopathy (Part 2 of the Questionnaire).

Alternative hypothesis 1: There was a significant correlation between any of the demographic variables (Part 1 of the Questionnaire i.e. gender, age, ethnic group, university registered at) and their knowledge of homoeopathy (Part 2 of the Questionnaire).

Correlations between demographic variables (i.e. gender, age, ethnic group, university registered at) and the following variables/factors were assessed:

- Question 6: Self described knowledge of homoeopathy
- Question 6.1: Source of knowledge
- Question 7: Incorporation of homoeopathic module
- Question 8: Interest in further information
- Question 9: Whether respondent has received homoeopathic treatment
- Question 10: Knowledge of training courses available in South Africa
- Question 11: Knowledge about length of time it requires to qualify as a homoeopath
- Question 12: Knowledge of homoeopathy's legal status
- Question 13: Knowledge of support by health care insurers

Significant correlations were established i.e. H_0 was rejected for certain categories. The significant correlations are shown in Table 4.5. These will be discussed in Chapter 5.

Table 4.5 Correlation of Personal information (Part 1) and Knowledge of homoeopathy (Part 2)

Correlated Factors	Pearson Chi Square Test (z-values)	Significance of Phi Value	Value of Asymmetric Measure	Conclusion
Gender * Qu 6.1 (Family)	p=4.028 z=0.045	Z=0.045	Phi= -0.149	Very weak correlation between factors. Females are more likely to know of homoeopathy from their families.
Gender * Qu 6.1 (Friend)	p=4.178 z=0.041	Z=0.041	Phi=-0.151	Very weak correlation between factors. Females are more likely to know of homoeopathy from their friends.
Ethnic*Qu 6	p=46.708 z=0.001	Z=0.001	Phi=0.508 Cramers V = 0.254 ^a	Strong correlation between factors. Asian, Indian and White ethnic groups are more likely to have a better level of self described knowledge. Blacks are more likely to have a lower level of self described knowledge.
Ethnic*Qu 6.1 (Family)	p=62.427 z=0.000	Z=0.000	Phi=0.587	Strong correlation between factors. Whites and Indians are most likely to have heard of homoeopathy from their family. Blacks are the least likely.
Ethnic*Qu 6.1 (Friend)	p=16.506 z=0.06	Z=0.006	Phi=0.302	Medium correlation between factors. Whites are most likely to have heard of homoeopathy from friends while Blacks are least likely.
Ethnic*Qu 9	P=25.263 z=0.000	Z=0.000	Phi=0.374	Medium correlation between factors. Whites are most likely to have been treated homoeopathically.
Ethnic*Qu 10	p=21.278 z=0.019	Z=0.019	Phi=0.343	Medium correlation between factors. Blacks are more likely to be unsure or not know about the existence of training courses.
Ethnic*Qu 13	p=39.722 z=0.000	Z=0.000	Phi=0.468 Cramers V= 0.331 ^a	Medium correlation between factors. Blacks and Asians were most likely to be "Unsure" whether health care insurers fund homoeopathy, while Whites were most likely to know.
University*Qu 6.1 (Family)	p=10.016 z=0.002	Z=0.002	Phi=0.235	Weak correlation between factors. UCT respondents were most likely to have heard of homoeopathy from their families.

University*Qu 9	p=13.620 z=0.000	Z=0.000	Phi=-0.274	Weak correlation between factors. UCT respondents were more likely to have been treated by a homoeopath before.
University*Qu 13	P=7.678 Z=0.002	Z=0.022	Phi=0.206	Weak correlation between factors. UCT respondents were more likely to be incorrect as to whether health care insurers fund homoeopathy i.e. more likely to say "No".

^a Due to the low number of rows and columns in each variable, Cramers V was only used as it where the number of rows and columns increases i.e. differs from Phi.

The value of the asymmetric measure indicates the strength of the correlation. The closer to one the asymmetric measure the stronger the correlation.

Phi <=3 is very weak correlation

Phi 3 to 4 weak correlation

Phi 4-5 moderate correlation

Phi >=5 Strong correlation

4.5.1.2 Personal information (Part 1) against Perceptions of homoeopathy (Part 3)

Null hypothesis 2: There was no significant correlation between any of the demographic variables (Part 1 of the Questionnaire i.e. gender, age, ethnic group, university registered at) and their perceptions of homoeopathy (Part 3 of the Questionnaire).

Alternative hypothesis 2: There was a significant correlation between any of the demographic variables (Part 1 of the Questionnaire i.e. gender, age, ethnic group, university registered at) and their perceptions of homoeopathy (Part 3 of the Questionnaire).

Correlations between demographic variables (i.e. gender, age, ethnic group, university registered at) and the following variables/factors were assessed:

- Question 14: Respondents belief as to whether homoeopathy has any scientific basis.
- Question 16: Whether respondents believe homoeopathy to be a legitimate form of medicine.
- Question 18: Respondents belief as to whether homoeopathic medicine is a form of placebo effect.

- Question 20: Respondents belief as to whether the public accepts homoeopathy as a form of medical treatment.
- Question 24: Respondents belief as to whether homoeopathic medications can cause side effects.
- Question 29: Respondents belief as to whether a homoeopath is a skilled primary care practitioner.
- Question 30: Respondents belief as to whether homoeopathy could be incorporated into hospital care.

Significant correlations were established i.e. H_0 was rejected for certain categories. The significant correlations are shown in Table 4.6. These will be discussed in Chapter 5.

Table 4.6 Correlation of Personal information (Part 1) and Perceptions of homoeopathy (Part 3)

Correlated Factors	Pearson Chi Square Test (z-values)	Significance of Phi Value	Value of Asymmetric Measure	Conclusion
Ethnic*Qu 14	p=27.411 z=0.002	z=0.002	Phi= 0.389	Weak correlation between factors. Coloureds were most likely to answer "Yes", Blacks most likely to answer "Unsure" and Whites most likely to answer "No" to whether homoeopathy has any scientific basis.
Ethnic*Qu 18	p=26.212 z=0.003	z=0.003	Phi= 0.381 Cramers V= 0.269 ^a	Weak correlation between factors. Asians and Whites were most likely to believe, while Indians were most likely to not believe homoeopathy to be a form of placebo treatment.
Ethnic*Qu 24	p=33.297 z=0.000	z=0.000	Phi= 0.429 Cramers V= 0.303 ^a	Weak correlation between factors. Whites and Indians were most likely to think homoeopathy can cause side effects while Coloureds were least likely.
University*Qu 16	p=11.290 z=0.010	z=0.010	Phi= 0.250	Very weak correlation between factors. UCT respondents were more likely than UKZN respondents to not view homoeopathy as a legitimate form of medical treatment. UKZN respondents were more likely to either feel that it is a legitimate form or to be "Unsure".
University*Qu 18	P=7.699 z=0.021	z=0.021	Phi= 0.206	Very weak correlation between factors. UCT respondents were more likely than UKZN respondents to believe homoeopathy to be a placebo. UKZN respondents were more likely to be "Unsure" or believe it to not be form of placebo.

University* Qu 29	p=19.360 z=0.000	z=0.000	Phi= 0.327	Weak correlation between factors. UCT respondents were most likely to feel homoeopaths to not be skilled primary care practitioners.
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^a Due to the low number of rows and columns in each variable, Cramers V was only used as it where the number of rows and columns increases i.e. differs from Phi.

4.5.1.3 Personal information (Part 1) against Communication (Part 4)

Null hypothesis 3: There was no significant correlation between any of the demographic variables (Part 1 of the Questionnaire i.e. gender, age, ethnic group, university registered at) and communication (Part 4 of the Questionnaire).

Alternative hypothesis 3: There was a significant correlation between any of the demographic variables (Part 1 of the Questionnaire i.e. gender, age, ethnic Group, university registered at) and communication (Part 4 of the Questionnaire).

Correlations between demographic variables (i.e. gender, age, ethnic group, university registered at) and the following variables/factors were assessed:

- Question 31: Respondents belief as to whether inter-disciplinary co-operation between GP's and homoeopaths would benefit patients.
- Question 32: Whether respondents would consider working with or referring to a homoeopath.

- Question 33: Whether respondents would consider sharing premises with a practitioner registered with the Allied Health Professions Association of South Africa (AHPCSA).
- Question 34: Whether respondents believe it is important for a medical doctor to know about alternative forms of treatment.
- Question 35: Whether respondents would consider incorporating homoeopathy into their practice.
- Question 36: Respondents beliefs as to what training is necessary for a medical doctor to prescribe homoeopathic medication.

Significant correlations were established i.e. H_0 was rejected for certain categories. The significant correlations are shown in Table 4.7. These will be discussed in Chapter 5.

Table 4.7 Correlation of Personal information (Part 1) and Communication (Part 4)

Correlated Factors	Pearson Chi Square Test (z-values)	Significance of Phi Value	Value of Asymmetric Measure	Conclusion
University*Qu 34	p=6.772 z=0.034	z=0.034	Phi=0.193	Very weak correlation between factors. UCT respondents were more likely than UKZN respondents to feel that it is not important for a GP to know about alternative forms of treatment. (Both groups of respondents however overwhelmingly feel it to be important.)

4.5.2 Hypothesis testing - controlling for variables

In this section the above analyses were repeated. In this case however the following variables were controlled for:

- Ethnic group
- University registered at

Controlling for a variable allows the following:

- To reveal correlations between specific sub-groups of the variables which are otherwise hidden.
- To reveal deeper patterns in variables that appear correlated, but may be due to other factors.

4.5.2.1 Controlling for ethnic group - Personal information (Part 1) against the remainder of the Questionnaire (Part 2, 3 and 4).

In Section 4.4 (Table 4.3 and Figure 4.5 and 4.6) it is evident that the University of Cape Town and the University of KwaZulu Natal are fairly different in terms of relative ethnic composition. By controlling for ethnic grouping, the correlations were assessed in order to determine real effects of the subjects' university.

Null hypothesis 4: There was no significant correlation between any of the demographic variables (Part 1 of the questionnaire i.e. gender, age, university registered at) and their responses to the rest of the Questionnaire (Parts 2, 3 and 4).

Alternative hypothesis 4: There was a significant correlation between any of the demographic variables (Part 1 of the Questionnaire i.e. gender, age, ethnic group, university registered at) and their responses to the surveyed questions.

Correlations between demographic variables (i.e. gender, age, ethnic group, university registered at) and the following variables/factors were assessed:

- Question 6: Self described knowledge of homoeopathy
- Question 6.1: Source of knowledge
- Question 7: Incorporation of homoeopathic module

- Question 8: Interest in further information
- Question 9: Whether respondent has received homoeopathic treatment
- Question 10: Knowledge of training courses available in South Africa
- Question 11: Knowledge about length of time it requires to qualify as a homoeopath
- Question 12: Knowledge of homoeopathy's legal status
- Question 13: Knowledge of support by health care insurers
- Question 14: Respondents belief as to whether homoeopathy has any scientific basis.
- Question 16: Whether respondents believe homoeopathy to be a legitimate form of medicine.
- Question 18: Respondents belief as to whether homoeopathic medicine is a form of placebo effect.
- Question 20: Respondents belief as to whether the public accepts homoeopathy as a form of medical treatment.
- Question 24: Respondents belief as to whether homoeopathic medications can cause side effects.
- Question 25: Respondents view of the risks of homoeopathic medication as compared to conventional medication.
- Question 29: Respondents belief as to whether a homoeopath is a skilled primary care practitioner.
- Question 30: Respondents belief as to whether homoeopathy could be incorporated into hospital care.

- Question 31: Respondents belief as to whether inter-disciplinary co-operation between GP's and homoeopaths would benefit patients.
- Question 32: Whether respondents would consider working with or referring to a homoeopath.
- Question 33: Whether respondents would consider sharing premises with a practitioner registered with the AHPCSA.
- Question 34: Whether respondents believe it is important for a medical doctor to know about alternative forms of treatment.
- Question 35: Whether respondents would consider incorporating homoeopathy into their practice.
- Question 36: Respondents beliefs as to what training is necessary for a medical doctor to prescribe homoeopathic medication.

Significant correlations were established i.e. H_0 was rejected for certain categories. The significant correlations are shown in Table 4.8. These will be discussed in Chapter 5.

Table 4.8 Correlation of Personal information (Part 1) against the remainder of the Questionnaire (Part 2, 3 and 4) with ethnic grouping controlled

Correlated Factors (Ethnic Group controlled for)	Pearson Chi Square Test (z-values)	Significance of Phi Value	Value of Asymmetric Measure	Correlated within Ethnic Sub-group	Comment
Gender*Qu 6.1 (Family)	p=10.000 z=0.002	z=0.002	Phi= 1.000	Asian	Strong correlation between factors. Asian females more likely than males to have heard from their family.
Gender*Qu 6.1 (Family)	p=4.958 z=0.026	z=0.026	Phi= 0.540	Coloured	Strong correlation between factors. Coloured females more likely to have heard from family than males.
Gender*Qu 8	p=13.417 z=0.001	z=0.001	Phi= 0.565	White	Strong correlation between factors. White females more interested in knowing more than White males (more likely to be "Unsure").
Gender*Qu 10	p=7.730 z=0.025	z=0.025	Phi= 0.419	White	Strong correlation between factors. Of the Whites who were not aware of the training courses females are more likely to be "Unsure" and males more likely to say "No" i.e. incorrect, regarding homoeopathic training courses.
Gender*Qu 13	p=10.000 z=0.007	z=0.007	Phi= 1.000	Asian	Strong correlation between factors. Asian males more likely to say "No"; females more likely to be "Unsure" (or say "Yes") regarding the issue of support from health care insurers.
Age*Qu 6	p=25.545 z=0.004	z=0.004	Phi= 0.764	White	Strong correlation between factors. Whites in older age groups were more likely to have a

					better level of self described knowledge of homoeopathy.
Age*Qu6.1 (Family)	p=16.505 z=0.002	z=0.002	Phi= 0.451	Black	Strong correlation between factors. Blacks from older age groups were less likely to have heard of homoeopathy from their family.
Age*Qu6.1 (Other)	p=12.606 z=0.006	z=0.006	Phi= 0.548	White	Strong correlation between factors. Whites in the 26-30 age group were slightly more likely to have heard of homoeopathy from other sources. (This could be in addition to the other channels explored).
Age*Qu 8	p=6.875 z=0.032	z=0.032	Phi= 0.829	Asian	Strong correlation between factors. Asians in the youngest age group were more likely to be unsure of whether they would be interested in knowing more about homoeopathy.
Age*Qu 9	p=26.777 z=0.000	z=0.000	Phi= 0.575	Black	Strong correlation between factors. Blacks in the younger age categories were more likely than older Blacks to have been treated by a homoeopath.
Age* Qu 9	p=4.588 z=0.032	z=0.032	Phi= 0.391	Indian	Weak correlation between factors. Indians in the younger age categories were more likely than older Indians to have been treated by a homoeopath.
University*Qu 6.1 (University)	p=6.667 z=0.010	z=0.010	Phi= 0.816	Asian	Strong correlation between factors. Asians at UCT were more likely than at UKZN to have heard

					of homoeopathy through the university.
University*Qu 6.1(Family)	p=4.224 z=0.040	z=0.040	Phi= 0.375	Indian	Weak correlation between factors. Indians at UCT were more likely than at UKZN to have heard of homoeopathy through family.
University*Qu 9	p=8.727 z=0.003	z=0.003	Phi= 0.539	Indian	Strong correlation between factors. Indians at UCT were more likely to have been treated by a homoeopath before.
University*Qu 11	p=8.097 z=0.044	z=0.044	Phi= 0.439	White	Moderate correlation between factors. Whites at UKZN were more likely than at UCT to know the correct duration of the homoeopathic study program.
University*Qu 13	p=8.565 z=0.014	z=0.014	Phi= 0.534		Strong correlation between factors. Indians at UCT were more likely than at UKZN to know the correct status of homoeopathy with respect to health care insurers.

4.5.2.2 Controlling for university registered at - Personal information (Part 1) against the remainder of the Questionnaire (Part 2, 3 and 4)

In Section 4.4 (Table 4.3 and Graph 4.5 and 4.6) it is evident that the University of Cape Town and the University KwaZulu Natal are fairly different in terms of relative ethnic composition. By controlling for ethnic grouping, the correlations were assessed. By controlling for the university registered at, it is possible to reveal correlations between different groups within each university i.e. this treatment approaches each university's respondents as a separate population within the sample population.

Null hypothesis 5: There was no significant correlation between any of the demographic variables (Part 1 of the Questionnaire i.e. gender, age, ethnic group, university registered at) and their responses to the rest of the Questionnaire (Parts 2, 3 and 4).

Alternative hypothesis 5: There was a significant correlation between any of the demographic variables (Part 1 of the Questionnaire i.e. gender, age, ethnic Group, university registered at) and their responses to the rest of the questionnaire (parts 2, 3, and 4).

Correlations between demographic variables (i.e. gender, age, ethnic group, university registered at) and the following variables/factors were assessed:

Significant correlations were established i.e. H_0 was rejected for certain categories. The significant correlations are shown in Table 4.9. These will be discussed in Chapter 5.

Table 4.9 Correlation of demographic variables Personal information (Part 1) against the remainder of the Questionnaire (Part 2, 3 and 4) with university controlled for

Correlated Factors (Ethnic Group controlled for)	Pearson Chi Square Test (z-values)	Significance of Phi Value	Value of Asymmetric Measure	Correlated within which University sub-population	Comment
Age*Qu 6	p=28.899 z=0.000	z=0.000	Phi= 0.590	UCT	Strong correlation between factors. Older UCT respondents were more likely to have a better level of self described knowledge of homoeopathy.
Age*Qu 6.1 (Doctor)	p=7.252 z=0.027	z=0.027	Phi= 0.296	UCT	Weak correlation between factors. Older UCT respondents were more likely to have heard of homoeopathy from their doctor.
Age*Qu 6.1 (Other)	p=7.356 z=0.27	z=0.025	Phi= 0.298	UCT	Weak correlation between factors. Older UCT respondents were more likely to have heard of homoeopathy from other sources.
Age*Qu 9	p=25.657 z=0.000	z=0.000	Phi= 0.512	UKZN	Strong correlation between factors. Older UKZN respondents were more likely to have been treated by a homoeopath before.
Age*Qu 9	p=6.970 z=0.031	z=0.031	Phi= 0.290	UCT	Weak correlation between factors. Older UCT respondents were more likely to have been treated by a homoeopath before.
Age*Qu 12	p=10.199 z=0.037	z=0.037	Phi= 0.351	UCT	Weak correlation between factors. Older UCT respondents were more likely to know homoeopathy's legal status.
Age*Qu 13	p=9.756	z=0.045	Phi= 0.343	UCT	Weak correlation

	z=0.045				between factors. Older UCT respondents were more likely to know homoeopathy's status with respect to health care insurers.
Age*Qu 25	p=13.299 z=0.010	Z=0.010	Phi= 0.400	UCT	Medium correlation between factors. Younger respondents at UCT were more likely to view the risks slightly less, while older respondents were more likely to view the risks as greater with homoeopathy.
Age*Qu 36	p=41.459 z=0.000	z=0.000	Phi= 0.707	UCT	Strong correlation between factors. Older respondents at the UCT were more likely to know the correct requirements for a medical practitioner to prescribe homoeopathic remedies.
Ethnic*Qu 6	p=50.723 z=0.000	z=0.000	Phi= 0.782	UCT	Strong correlation between factors. Asians at UCT were more likely to have a poorer level of self described knowledge. Indians were most likely to have a better level of self described knowledge.
Ethnic* Qu .1 (Family)	p=28.214 z=0.000	z=0.000	Phi= 0.537	UKZN	Strong correlation between factors. Whites at UKZN were more likely to have heard of homoeopathy from family.
	p=31.603 z=0.000	z=0.000	Phi= 0.617	UCT	Strong correlation between factors. Indians and Whites at UCT were most likely to have heard of homoeopathy from their family.
Ethnic*Qu 6.1 (Friend)	p=12.840 z=0.025	z=0.025	0.393	UCT	Medium correlation between factors.

					Whites and Coloureds at UCT were more likely to have heard of homoeopathy from a friend.
Ethnic*Qu 9	p=14.451 z=0.013	z=0.013	Phi= 0.417	UCT	Medium correlation between factors. Whites and Indians at UCT were more likely to have been treated by a homoeopath before.
Ethnic*Qu 11	p=25.841 z=0.011	z=0.011	Phi= 0.513	UKZN	Strong correlation between factors. Whites and Asians at UKZN were more likely to know the correct duration of the homoeopathic program.
Ethnic*Qu 13	p= 28.491 z=0.000	z=0.000	Phi= 0.539	UKZN	Strong correlation between factors. Blacks at UKZN were most likely to be “Unsure”, while Whites were more likely to know the status with respect to health care insurers.
	p=20.228 z=0.027	z=0.027	Phi= 0.494	UCT	Medium correlation between factors. Indians at UKZN were more likely to not know homoeopathy’s status with respect to health care insurers.
Ethnic*Qu 14	p=16.564 z=0.035	z=0.035	Phi= 0.411	UKZN	Medium correlation between factors. Coloureds at UKZN were more likely to view homoeopathy as having a scientific basis.
Ethnic* Qu 18	p=18.418 z=0.018	z=0.018	Phi= 0.434	UKZN	Medium correlation between factors. Coloureds at UKZN were more likely to view homoeopathy as a form of placebo; Whites are less likely.
Ethnic*Qu 24	p=25.224 z=0.001	z=0.001	Phi= 0.507	UKZN	Strong correlation between factors.

					Coloureds at UKZN were least likely to feel that homoeopathic medicine could cause side effects. Whites were more likely.
Ethnic*Qu 29	p=16.849 z=0.032	z=0.032	Phi= 0.415	UKZN	Medium correlation between factors. Asians and Whites at UKZN were more likely to believe the homoeopath is a skilled primary care practitioner.
Ethnic*Qu 33	p=17.162 z=0.028	z=0.028	Phi= 0.418	UKZN	Medium correlation between factors. Whites at UKZN were most likely to be willing to share premises in the future.

4.5.3 Correlations within questions

For questions where respondents could choose more than one response, Hierarchical Cluster analyses were performed. This allows the identification of clustered themes within responses e.g. identifying a certain component of a homoeopathy course was associated with identifying other components.

4.5.3.1 Question 17: What does the study of homoeopathy in South Africa entail to become a registered homoeopathic practitioner? Dendrogram using Wards Linkage

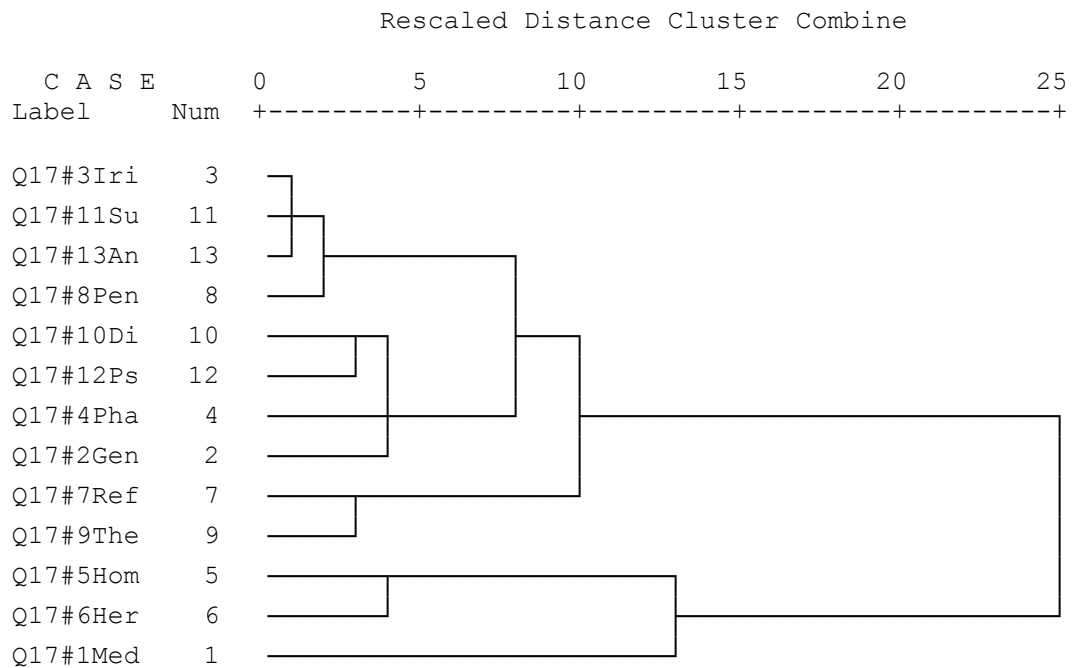


Table 4.10 Question 17: What does the study of homoeopathy in South Africa entail to become a registered homoeopathic practitioner? (Dendrogram)

Abbreviated Name	Category Name
Q17#1Med	General Medical Sciences
Q17#2Gen Pathology	General and Systemic
Q17#3Iri	Iridology
Q17#4Pha	Medical Pharmacology
Q17#5Hom	Homeopathic Medicines
Q17#6Her	Herbal Medicines
Q17#7Ref	Reflexology
Q17#8Pen	Use of Pendulum
Q17#9The	Therapeutic Massage
Q17#10Di	Diagnostics
Q17#11Su	Minor Surgery
Q17#12Ps	Psychopathology
Q17#13An	Anaesthetics

Table 4.10 suggests a four cluster situation, namely Cluster 1 (3, 11, 13, and 8) Cluster 2 (10, 12, 4 and 2), Cluster 3 (7 and 9) and Cluster 4 (5, 6, and 1).

- In Cluster 1, respondents who answered Q17#3 were also more likely to answer Q17#11, Q17#13 and Q17#8, but most likely to answer Q17#11 and least likely to answer Q17#8. This Cluster represents respondents who correctly identified the subjects that do not form part of the homoeopathic curriculum.
- In Cluster 2, respondents who answered Q17#10 were also more likely to answer Q17#12, Q17#4 and Q17#2, but most likely to answer Q17#12 and least likely to answer Q17#2. This Cluster represents respondents who were likely to know what the homoeopathic curriculum involves.
- In Cluster 3, respondents who answered Q17#7 were more likely to answer Q17#9.

- In Cluster 4, respondents who answered Q17#5 were also more likely to answer Q17#6 and Q17#1. This Cluster identifies a grouping of homoeopathic and herbal medicines with the study of the medical sciences. This potentially shows a level of legitimacy that homoeopathy is perceived to have.

These Clusters are discussed further in Chapter 5.

4.5.3.2 Question 21: Mark the blocks that you believe provide the best reasons why homoeopathy is not accepted. Dendrogram using Wards Linkage

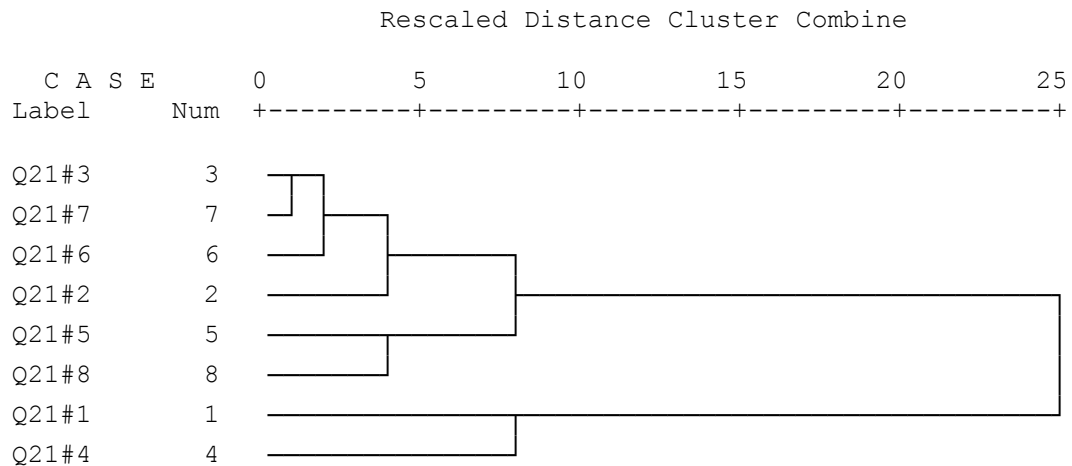


Table 4.11 Question 21: Mark the blocks that you believe provide the best reasons why homoeopathy is not accepted. (Dendrogram)

Abbreviated Name	Category Name
Qu21#1	Lack of understanding of homoeopathy
Qu21#2	The medication can be harmful
Qu21#3	Homoeopathic and allopathic medication cannot be used concurrently
Qu21#4	Inadequate marketing of homoeopathy
Qu21#5	It's effectiveness is unproven
Qu21#6	Homoeopathy is unaffordable
Qu21#7	Homoeopathy does not work
Qu21#8	Homoeopathy has no scientific basis

Table 4.11 suggests a two Cluster situation, namely Cluster 1 (3, 7, 6, 2, 5 and 8) and Cluster 2 (1 and 4). Further resolution can be obtained by splitting Cluster 1 into two with Sub-Cluster 1 (3, 7, 6, and 2) Sub-Cluster 2 (5 and 8).

- In Cluster 1, respondents who answered Q21#3 were also more likely to answer Q21#7, Q21#6, Q21#2, Q21#5 and Q21#8, but most likely to answer Q21#7 and least likely Q21#8.
- In Cluster 2, respondents who answered Q21#1 were also more likely to answer Q21#4.

These Clusters are discussed in Chapter 5.

4.5.3.3 Question 22: What kind of procedures would you expect a homoeopath to be able to and/or perform on his/her patient? Dendrogram using Wards Linkage

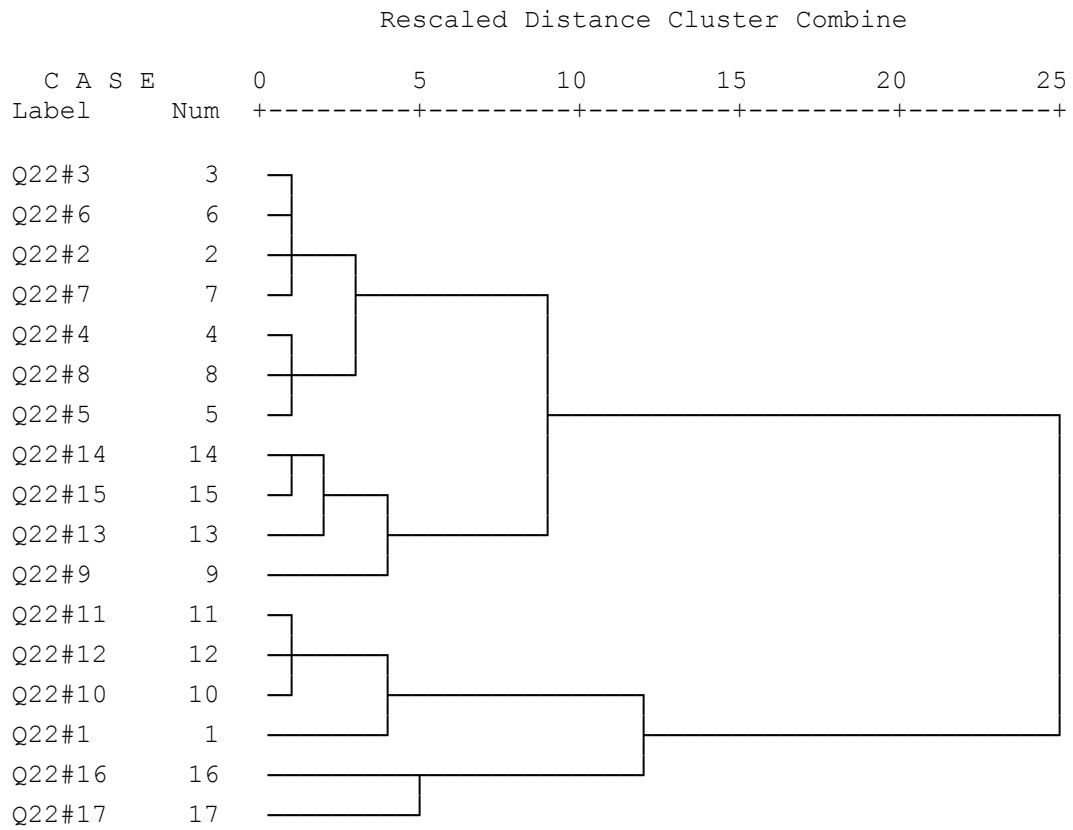


Table 4.12 Question 22: What kind of procedures would you expect a homoeopath to be able to and/or perform on his/her patient? (Dendrogram)

Abbreviated Name	Category Name
Qu21.1	Check the vital signs
Qu21.2	Cardiovascular examination
Qu21.3	Respiratory examination
Qu21.4	Ophthalmic examination
Qu21.5	Neurological examination
Qu21.6	Abdominal examination
Qu21.7	Musculo-skeletal examination
Qu21.8	Genito-urinary examination
Qu21.9	No examination
Qu21.10	Take a past medical history
Qu21.11	Take a family history
Qu21.12	Take a social history
Qu21.13	Auscultation
Qu21.14	Laboratory test
Qu21.15	Urine dip-stick
Qu21.16	Energy healing
Qu21.17	Adjustments and manipulations

Table 4.12 suggests a four Cluster situation, namely Cluster 1 (3, 6, 2, 7, 4, 8 and 5), Cluster 2 (14, 15, 13 and 9) Cluster 3 (11, 12, 10 and 1) and Cluster 4 (16 and 17).

- In Cluster 1, respondents who answered Q21.3 were also more likely to answer Q21.6, Q21.2, Q21.7, Q21.4, Q21.8 and Q21.5, but most likely to answer Q21.6 and least likely Q21.5. Cluster 1 identifies all the physical examinations. If the respondent's answered that they thought a homoeopath was able to perform one physical exam they were likely to believe that the homoeopath could perform various or all of the physical examinations.

- In Cluster 2, respondents who answered Q21.14 were also more likely to answer Q21.15, Q21.13 and Q21.9, but most likely to answer Q21.15 and least likely to answer Q21.9.
- In Cluster 3, respondents who answered Q21.11 were also more likely to answer Q21.12, Q21.10 and Q21.1, but most likely to answer Q21.12 and least likely to and Q21.1. Cluster 3 identifies the taking of the family, social and past medical history. The respondents also tended to group the checking of the vital signs with the taking of the case history.
- In Cluster 4, respondents who answered Q21.16 were also more likely to answer Q21.17.

These Clusters are discussed in Chapter 5.

4.5.3.4 Question 23: Homoeopathic treatment may be useful in which of the following complaints? Dendrogram using Wards Linkage

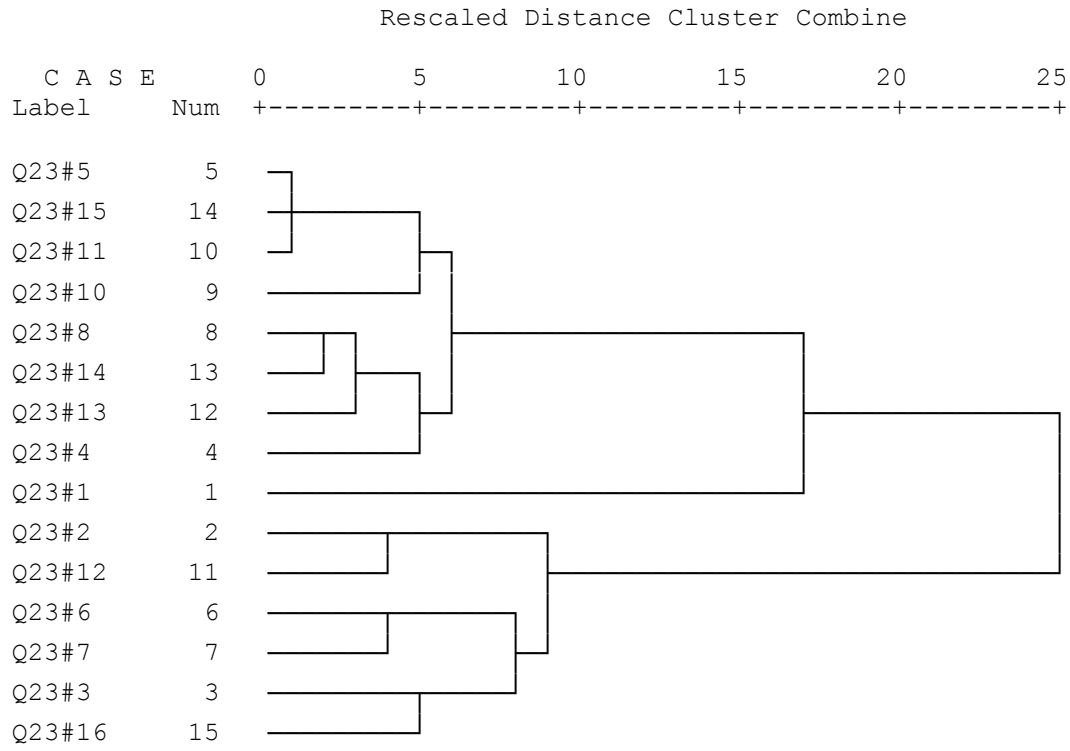


Table 4.13 Question 23: Homoeopathic treatment may be useful in which of the following complaints? (Dendrogram)

Abbreviated Name	Category Name
Qu 23.1	Any disease or disorder
Qu 23.2	Headache
Qu 23.3	Mechanical injury
Qu 23.4	Pregnancy
Qu 23.5	Emergency care/trauma
Qu 23.6	Psychological disease
Qu 23.7	Psychomotor disease
Qu 23.8	Auto-immune disease
Qu 23.9	Inflammatory disease
Qu 23.10	Pyrexia
Qu 23.11	Viral and bacterial disease
Qu 23.12	Back pain
Qu 23.13	Cancer
Qu 23.14	Neurological disease
Qu 23.15	Parasite infestation
Qu 23.16	Bruising and joint pain

Table 4.13 suggests a three Cluster situation, namely Cluster 1 (5, 14, 10, 9, 13, 12, and 4), Cluster 2 (1) and Cluster 3 (2, 11, 6, 7, 3 and 15).

- In Cluster 1, respondents who answered Q23.5 were also more likely to answer Q23.14, Q23.10, Q23.9, Q23.13, Q23.12 and Q23.4, but most likely to answer Q23.14 and least likely Q23.4.
- In Cluster 2, respondents who answered Q23.1 did so without responding to any other answer as Q23.1 includes all options.
- In Cluster 3, respondents who answered Q23.2 were also more likely to answer Q23.11, Q23.6, Q23.7, Q23.3 and Q23.15, but most likely to answer Q23.11 and least likely to and Q23.15.

These Clusters are discussed in chapter 5.

4.5.3.5 Question 37: Which of the following best reflects your view of homoeopathy? Dendrogram using Wards Linkage

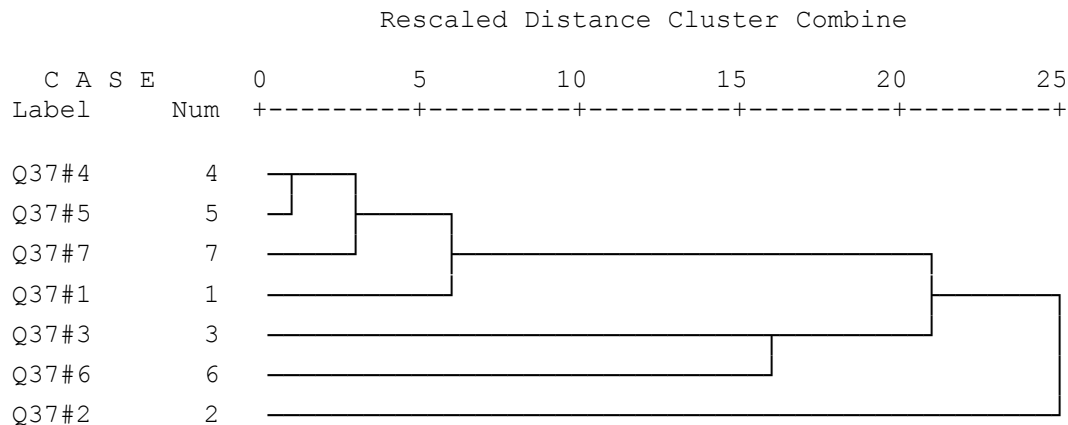


Table 4.14 Question 37: Which of the following best reflects your view of homoeopathy? (Dendrogram)

Abbreviated Name	Category Name
Qu37.1	I am uncomfortable with it, but it is effective for some patients
Qu37.2	I feel that it has a place in the treatment of patients
Qu37.3	I am not informed enough to comment
Qu37.4	It is quackery and does more harm than good
Qu37.5	I do not believe that it is of any benefit to patients
Qu37.6	I feel that more research needs to be conducted to prove its effectiveness
Qu37.7	It is an excellent mode of treatment

Table 4.14 suggests a three Cluster situation, namely Cluster 1 (4, 5 and 7), Cluster 2 (3 and 6) and Cluster 3 (2).

- In Cluster 1, respondents who answered Q37.4 were also more likely to answer Q37.5 and Q37.7, but most likely to answer Q37.5 and least likely Q37.7

- In Cluster 2, respondents who answered Q37.3 were also more likely to answer Q37.6.
- In Cluster 3, respondents who answered Q37.2 only chose this option.

These Clusters are discussed in Chapter 5.

CHAPTER 5

5 DISCUSSION

5.1 Introduction

The responses obtained from the respondents as well as the statistical analysis from Chapter 4, are interpreted and evaluated in this chapter.

5.2 Response rate

There were 83 respondents from a class of 184 students (45%) at the UCT that participated in the study. The UKZN had 197 students enrolled for their third year in 2006 and 98 of them (50%) completed the questionnaire.

One of the contributing factors to the low rate of returned questionnaires from the UCT was that the third year students in their second semester do not attend lectures at the university. This is due to the practical requirements of their course in which they spend time at various training hospitals throughout the province. This made it very difficult to access the medical students to ask for their participation in the study. The distribution of the questionnaires was eventually organised with the assistance of the class representatives.

The UKZN also had a relatively low return rate of questionnaires. The researcher was not allowed to use the student's class time to conduct the research. The researcher therefore explained to the students what was required of them and the questionnaires were then distributed during a tutorial period when all the students were required to be present. It was up to the students to fill in the questionnaire on his/her own time and then return the completed questionnaire to the class representative who would in turn pass them on to the researcher.

5.3 Part One: Personal information

5.3.1 Question 1: Gender

The gender distribution of the third year medical students was 123 males (68%) and 58 females (32%). The gender distribution in the sample from each of the two universities was similar. The notable gender split may be due to the fact that in the past, there has not been a long tradition of women studying medicine.

5.3.2 Question 2: Age

Around 94% of the respondents in the study came from the age group between 17 – 25 years old. Therefore most of the respondents participating in this study were below 26 years of age. This is expected when one considers the fact that the sample comprised third year university students, and most university students

come directly from a secondary education environment into a tertiary education environment. It must be kept in mind when saying this that most secondary education students in South Africa complete their secondary education at 17 or 18 years of age. It is also possible that some of the respondents may have taken a gap year prior to their medical studies, or that some of them may have started another higher education course without completing it and then began their medical studies thereafter.

5.3.3 Question 3: Ethnicity

The respondents in the sample population were divided into 6 ethnic categories. The largest ethnic group in this study was the Black group (45%). In total there were: 10 Asian (6%), 81 Black (45%), 17 Coloured (9%), 30 Indian (17%), 42 White (23%), and 1 other (1%).

The ethnic composition at each university was very different. At the UCT the largest ethnic group in this study was the White group (45%), followed by the Black group (31%). There were also 4 Asian (5%), 8 Coloured (10%), 7 Indian (8%), and 1 other (1%) respondents. The predominance of White respondents may be a legacy effect, stemming from the time of apartheid government, when the UCT medical school was restricted to White and Coloured students. At the UKZN the largest ethnic group in this study was the Black group (56%), whilst the smallest group was the White group (5%). There were also 6 Asian (6%), 9

Coloured (9%) and 23 Indian (23%) respondents. The predominance of Black and Indian respondents may be a legacy effect, stemming from the time of the apartheid government, when the UKZN medical school was restricted to students other than White students.

The different ethnic composition of each university had an influence on the answers given, as shown in the correlation analysis.

It is important to mention that there was a separate category for the Asian and the Indian ethnic group in the questionnaire. Therefore, to avoid any confusion in future studies, these two groups should be combined.

5.3.4 Question 4 and 5: University attended and year of study

Two universities were selected to participate in this research in order to gain a wider perspective on third year medical student's perceptions of homoeopathy. This question was used as a confirmatory question to investigate which students met the inclusion criteria for the study and which did not. All of the respondents that participated in this study had to be registered for their third year of their MBChB at either the UCT or the UKZN in 2006.

5.4 Part Two: Knowledge of homoeopathy

5.4.1 Question 6: How would you describe your knowledge of homoeopathy?

The majority of the respondents (96%) had heard of homoeopathy, with a substantial percentage (21%) being familiar or very knowledgeable about it. It is very positive to note that only 4% of the respondents had never heard of homoeopathy.

The respondents from the UCT indicated a slightly higher percentage of knowledge than the respondents from the UKZN. Seventy seven percent of the respondents from the UCT knew something about homoeopathy or were very knowledgeable about it compared to 68% of the respondents from the UKZN. Only 1 respondent from the UCT indicated that they had never heard of homoeopathy compared to 6 respondents from the UKZN.

These results are comparable to those found by Maharajh (2005) in her study of general practitioners and pharmacists where she found that 68% of respondents knew of homoeopathy. These results are different to those of Small (2004) in her study of Grade 12 learners where she found that the learners had a lack of awareness of homoeopathy and 76% of them had never heard of homoeopathy, and to those of Teixeira, Lin, and Martins (2005) in their study of medical

students in Brazil where they found that 84% of respondents had little or no knowledge with regards to homoeopathy.

This high percentage may be due to the fact that there is now more exposure given to alternative treatments in the popular media (e.g. the radio program “Health Matters” on SAFM (SAFM, 2007) and this may contribute to medical students having more awareness regarding these therapies.

In the correlation analysis the Asian, Indian and White ethnic groups were more likely to have a better level of self described knowledge whereas Black respondents were more likely to have a lower level of self described knowledge. The possible reasons for the Black group having the lowest levels of self described knowledge may be associated with the apartheid era. During this time the Black community had very little opportunity for tertiary education and it was only the privileged ones that had access to such education and proper medical treatment, hence the vast majority of Black people would not have had the exposure to a lot of the alternative treatments other than their own traditional medical practices. For the same reasons, there are not a lot of Black graduates from the DUT and UJ homoeopathic programs, so the role model effect of homoeopaths in the Black community is limited.

It was very positive to see that 96% of the overall respondents said that they had heard of homoeopathy.

5.4.2 Question 6.1: If you have heard of homoeopathy before, where did you hear about it?

The most common source of information on homoeopathy identified by the respondents was the media (78%). This was followed by the university (65%), family (59%), friends (49%) and from a doctor (11%). This information may be important in selecting the appropriate means to market homoeopathy more effectively in the future.

The media has become a very important tool for communication. These days the internet is becoming more accessible and has brought CAM information into the home but with little concern for accuracy, risk identification, educational level of the reader, or scientific verification (Konefal, 2002). In a research conducted by Lie and Broker (2004) with first and second year medical students they identified the internet (81%) as the chief CAM information source.

Singh, Raidoo, and Harries (2004) survey showed that 52% of the CAM users were either advised by somebody, or they were influenced by advertisements in the local newspaper, books or magazines. In a survey conducted by Greenfield *et al.* in 2002 similar results were found. It was shown that the first year medical student's attitudes towards CAM might be shaped by influences outside the formal curriculum. Family use of CAM was a strong predictor of student use and this reflects the important role of the family in transmitting health behaviour and

attitudes. This point is illustrated in this study where a large percentage (59%) of the respondents identified their family as their source of information on homoeopathy.

In this study 65% of the respondents gave the university as their source of knowledge on homoeopathy. The medical students, from both universities, in their first three years and throughout their course have no formal modules on homoeopathy incorporated into their course (Klingenberg and MacTaggot, 2006). Therefore one can conclude that any knowledge gained through the university is through informal channels.

A smaller percentage (11%) of the respondents identified their medical practitioner as their source of knowledge. It is hoped that studies like this will bridge the divide between homoeopathy and allopathy to provide a more holistic healthcare option, which will be in the best interest of the patient.

In the correlation analysis it was found that the groups that were most likely to have heard of homoeopathy from their family were White respondents from the UKZN, and White and Indian respondents from the UCT. This could be due to the fact that historically most homoeopaths in South Africa have been White and Indian, so there is a greater awareness in members of the general public drawn from those groups.

It was found in the analysis that females were more likely to have heard about homoeopathy from their families and friends. Females are often more open to discuss life topics including health problems with their friends and family. They tend to seek advice from people more easily, and they are more often aware of their emotions and more willing to seek and try things that may at first seem unconventional. Men often stick to more practical treatments. Men also have an apparent reluctance to consult with a doctor. They are less likely to talk about their health problems with friends or health professionals. Even though men do care about health issues they find it difficult to express their fears (Banks, 2004).

5.4.3 Question 7: Is there a module on homoeopathy incorporated into your course?

Of the sample, 7% (13) answered 'Yes' to this question, of these 7 were from the UKZN and 6 from the UCT. At this point there is no formal alternative medicine module incorporated into the medical curriculum at the UCT or the UKZN (Klingenberg and MacTaggot, 2006), so this question may have been misunderstood or misinterpreted.

In a study conducted by Baugniet, Boon and Østbyte (2000) with students from different health care faculties in Canada, it was found that the medical students reported no discussion of CAM in their training. Interestingly, most students (87%) regardless of professional affiliation, agreed that "Practitioners should

have some knowledge about the most common CAM therapies” which seems to indicate that health care profession students from all faculties identify a need for discussion of CAM within their curricula.

Whites and Asians from the UKZN were more likely than at the UCT to know the correct duration of the homoeopathic study program. This could be due to the fact that there is a homoeopathic training course at the Durban University of Technology and hence in the same city whereas Cape Town has at present no formal homoeopathic training institution.

5.4.4 Question 8: Would you be interested in finding out more about homoeopathy

Sixty eight percent of respondents indicated an interest in learning more about homoeopathy. This is very positive for homoeopathy and indicates a need for homoeopathy and other forms of alternative treatment to be included into the medical curriculum. As the awareness of alternative forms of treatment grows greater attention needs to be given to providing an accurate education on this subject.

Surveys undertaken in South Africa (Daphne, 1997; Small, 2004; Turner 2005; Wortmann, 1997) all indicated that the majority of respondents wished to learn more about homoeopathy. Other studies (Baugniet, Boon and Østbyte, 2000 and

Teixeira, Lin and Martins, 2005) found a high interest amongst the participants in receiving training to practice a form of CAM.

Further investigation needs to be conducted to find out if this interest continues until the respondents qualify and once they have established their practice.

5.4.5 Question 9: Have you ever been treated by a homoeopath?

Eighty six percent of the respondents from both universities had never been treated by a homoeopath. There was still a reasonable percentage (14%) that had been treated by a homoeopath. Most of these (20 out of 83 respondents) were from the UCT, with only 5 (5 out of 98 respondents) being from the UKZN. This is an interesting result considering that the respondents from the UKZN have a homoeopathic training institution in the same city and yet far fewer of them had ever been treated by a homoeopath.

In the study conducted by Baugniet, Boon and Østbyte 2000 with students from health care faculties a total of 28% of students had consulted a CAM practitioner. Of the medical students in the study, 10% of them had consulted with a CAM practitioner. In the research conducted by Small (2004) the results were far lower where only a mere 3,7% of students had been treated by a homoeopath.

The respondents have not been exposed to homoeopathy in their medical curriculum and therefore they might not have been exposed to the potential benefits of consulting a homoeopath. They may not have access to homoeopaths or have grown up with conventional treatment and hence stay with what they know and what they think works for them. The respondents might not have had reason to question their treatment modalities and are at this point satisfied with the conventional treatment that they have received and therefore may not have entertained the idea of consulting with a homoeopath. Homoeopathy is also still not widely accepted among the medical fraternity. There were some respondents that felt homoeopathy did not work. If you feel that something has no potential benefit you are not likely to try it.

In the correlation analysis it was found that White and Indian respondents at the UCT were more likely to have been treated homoeopathically with White respondents being most likely. This could be due to White respondents having more exposure and generally a better financial status to be able to try alternative treatments such as homoeopathy. Blacks and Indians in the younger age categories were more likely than older Blacks and Indians to have been treated by a homoeopath. No definitive conclusion can be drawn from this information; however it is possible that younger Blacks and Indians post-apartheid have had better access to information about homoeopathy.

5.4.6 Question 10: Do you know if there is any training courses available in South Africa for people to become homoeopaths?

At present it is only the Durban University of Technology and the University of Johannesburg that offers formal training in homoeopathic medicine in South Africa.

Just over half of the respondents (52%) were certain that there are training institutions in this country. This shows some level of awareness of homoeopathic training. Less than a quarter (24%) of the respondents answered the question incorrectly by stating that there are no homoeopathic training courses in this country. A higher percentage of respondents from the UKZN (56%) compared to (48%) those from the UCT were aware of a homoeopathic training institution in this country. The slightly higher level of knowledge from the UKZN respondents could be due to the fact that there is a homoeopathic course offered in the same city at the Durban University of Technology.

5.4.7 Question 11: Indicate how many years you believe it requires to qualify as a homoeopath

Opinions were varied on the length of the training course. A reasonable percentage of respondents (22%) perceived that the course in homoeopathy was of 5 years duration. Forty one percent thought the study of homoeopathy was a

3 year diploma and 20% thought it only took a one year certificate to qualify as a homoeopath.

In the study conducted by Maharajh (2005), 27% of pharmacists thought it took 5 years to qualify compared to 22% of general practitioners. Also 18% of pharmacists and 15% of general practitioners perceived that the course was longer than 5 years in duration.

5.4.8 Question 12: Is homoeopathy recognised by law in South Africa?

The majority of the respondents (58%) were unsure of the legal status of homoeopathy in South Africa. This reinforces the perception of a gap between professed interest and knowledge by the respondents and their actual knowledge of homoeopathy. It must be said however, that the wording of this question may have been misleading i.e. what does being recognised by law mean? More exact wording as to the legal status of practicing homoeopaths could have elicited more exact responses.

Thirty three percent of respondents from the UCT answered 'Yes' to the question compared to 39% from the UKZN; however the difference is not marked. The answering of this question does indicate a fairly limited knowledge of the specifics of the homoeopathic profession in South Africa, and confusion about it, with so many (58%) of the respondents answering unsure.

5.4.9 Question 13: Do health care insurers in South Africa fund homoeopathy?

Seventy one percent of the respondents were unsure of the status of homoeopathy with respect to health care insurers. Thirteen percent of the respondents answered 'Yes' and 16% answered 'No'. More respondents (79%) from the UKZN were unsure of the answer compared to 61% from the UCT.

The sample group consisted only of students. Most students at this stage have not had to personally deal with health care insurers and therefore are possibly ignorant about their policies, especially when it comes to alternative medicine.

According to Maharaj's study (2005) 55% of pharmacists and 42% of general practitioners thought that homoeopathy was funded by health care insurers. This result is a lot higher and could be potentially due to their greater exposure to health care insurers.

In the correlation analysis the UCT respondents were more likely to be incorrect as to whether health care insurers fund homoeopathy i.e. more likely to say 'No' but the older UCT respondents were more likely to know the status of homoeopathy in regards to health care insurers. Therefore it is more likely that the level of awareness is more related to age than it is to the province or race of the respondent. Indians at the UCT were more likely than at the UKZN to know

the correct status of homoeopathy with respect to health care insurers. Blacks at the UKZN were most likely to be 'Unsure', while Whites were more likely to know the status with respect to health care insurers possibly associated with a better knowledge of homoeopathy in general.

The last four questions, from Question 10 – 13 were fairly poorly answered with many unsure answers and quite a few incorrect answers as well. This is indicative that the respondents have a fairly poor knowledge when it comes to more specific questions about the status of the homoeopathic profession in South Africa.

5.5 Part Three: Perceptions of homoeopathy

In order to determine the respondents' perceptions of homoeopathy, a series of questions were asked, from homoeopathy being a legitimate form of medicine to the procedures the homoeopath is able to perform. This gave an insight into the respondents' perceptions of homoeopathy. The overview suggests an overall 'positive' perception of homoeopathy.

5.5.1 Question 14: Do you believe that homoeopathy has any scientific basis?

Opinions varied as to whether homoeopathy has a scientific basis or not. A positive result was shown in that only 15% felt that homoeopathy does not have a scientific basis. The main reason cited was that not enough research had been conducted with regard to homoeopathic medicines. Forty Four percent felt that homoeopathy does have a scientific basis, while 41% were unsure. In the study conducted by Paruk (2005) amongst pregnant females, 67% felt that homoeopathy had a scientific basis.

There was a very similar perception toward homoeopathy amongst the respondents from both universities, with 41% of the respondents from the UCT feeling that homoeopathy does have a scientific basis compared with 45% from the UKZN. There was a higher percentage (22%) of respondents from the UCT that felt homoeopathy had no scientific basis compared to only 10% from the UKZN.

In the correlation analysis Coloureds were most likely to answer 'Yes', Blacks most likely to be 'Unsure' and Whites most likely to say 'No' to whether homoeopathy has any scientific basis. The White respondents are possibly more accustomed to the traditional mainstream forms of western medicine and the

scientific research and testing process, because homoeopathy does not always conform to these parameters, they see homoeopathy as unscientific.

5.5.2 Question 15: If you answered 'NO' to the above question, which statement explains your reasoning best?

This question was divided into 5 possible answers:

- Not enough research has been conducted (46%)
- Evidence is not reliable (11%)
- Homoeopathy is based on unfounded medical principles (27%)
- Homoeopathy and science have no relation (8%)
- Other (8%)

The main reason cited for homoeopathy not having a scientific base was that not enough research has been conducted.

The main difference between the respondents from the two universities was that the majority (67%) of the UKZN respondents felt that not enough research has been conducted whereas only 31% felt this from the UCT. In terms of homoeopathy being based on unfounded medical principles, the UCT had 31% compared to the UKZN 13%.

Clinical trials about homoeopathy have been performed around the world (Boiron, 2002). In terms of the homoeopathic medicines, every homoeopathic remedy has been tested before it is used (De Schepper 2001:32-36), and the production methods in factories conform to strict pharmaceutical methods (Hopkins, 2004). There is continual and ongoing research into homoeopathy and its medicines, but it unfortunately does not have the financial backing of the big pharmaceutical companies and therefore the research methods may seem limited in comparison to allopathic medicine (Feder and Katz, 2002).

The study by Teixeira, Lin and Martins (2005) also found that 'no scientific proof for homoeopathy' was the main reason given as to why homoeopathy should not be included in primary care services.

5.5.3 Question 16: Do you consider homoeopathy to be a legitimate form of medicine?

Fifty one percent of all respondents perceived that homoeopathy is a legitimate form of medicine. Thirty five percent did not want to commit either way and marked the 'Unsure' box. Only 14% felt that homoeopathy was not a legitimate form of medicine. These are very positive results and show that homoeopathy has the potential to become more widely accepted.

In the study conducted by Brundin-Mather, Avinashi, and Verhoef (2005) amongst first and second year medical students from Canada with regards to homoeopathy, 48% of the students felt that it was a safe form of treatment, 20% felt that it was effective and 9% used it personally. This positive perspective echo's the view expressed by the respondents in this study.

5.5.4 Question 17: What does the study of homoeopathy in South Africa entail to become a registered homoeopathic practitioner?

The responses were divided into three categories:

- Low-level (below 40 responses – minor surgery, iridology, anaesthesia, pendulum use). In the dendrogram (see Table 4.10) this group forms Cluster 1.
- Mid-level (between 40 and 80 responses – psychopathology, diagnostics, therapeutic massage, reflexology, medical pharmacology and general and systemic pathology). In the dendrogram (see Table 4.10) this group forms Cluster 2 and 3.
- High-level (above 80 responses – medical sciences, homoeopathic medicines, herbal medicines). In the dendrogram (see Table 4.10) this group forms Cluster 4.

The low level responses correctly recognise subjects that are not part of the homoeopathic training course, with around 22% of the respondents saying that

this category was a part of the homoeopathic training. This group is represented by Cluster 1 in the dendrogram analysis. This Cluster shows an irregular answering pattern without clear logic. Anaesthesia and minor surgery is a very scientific and specialised study compared with the esoteric pendulum use. This indicated confusion and lack of knowledge on what the study of homoeopathy entails.

The high level category, 44% or more of the respondents, correctly recognise subjects that do form part of the homoeopathic training, while the mid level responses (34%) incorrectly classify both subjects that do and do not form part of the training (e.g. therapeutic massage and reflexology vs. general and systemic pathology) indicating a confusion about the training of homoeopaths. These results show that around 56% of the respondents are confused or incorrect about what homoeopathic training entails, and would therefore have an incorrect assumption about the nature of the homoeopathic profession and its practice.

A high percentage of the respondents felt that the study of homoeopathy entails the study of the medical science hence reiterating the view that homoeopathy is viewed with some degree of legitimacy. The respondents that gave this answer were also likely to say that the study of homoeopathy entailed the study of homoeopathic and herbal medicines as identified in Cluster 4.

It is interesting to note that 21 of the respondents (12%) did not think that the study of homoeopathy entailed the study of homoeopathic medication. There

was no significant difference between the opinions expressed by the respondents from the two universities.

In the correlation analysis the UCT respondents were more likely than the UKZN respondents to feel that homoeopathy was not a legitimate form of medicine and that in fact homoeopathic medication was due to placebo and that homoeopaths are not skilled primary care practitioners. UKZN respondents were more likely to feel that it was legitimate, not placebo based, or they were more likely to answer 'Unsure'.

5.5.5 Question 18: Do you believe homoeopathic medication to be a form of placebo treatment?

Forty five percent of the respondents felt that homoeopathic medication was not a form of placebo treatment. This reflects the level of legitimacy with which homoeopathy is viewed for the most part. Thirty one percent said they were 'Unsure' and 24% said that homoeopathy was a form of placebo treatment.

A higher percentage (31%) of the respondents from the UCT felt that homoeopathic medicine was a form of placebo treatment compared to 18% of respondents from the UKZN. Coloureds at the UKZN were more likely to view homoeopathic medicine as a form of placebo treatment, while Whites were least

likely. This perception by Whites is surprising, considering they were most likely to regard homoeopathy as having no scientific basis (Question 14).

In Paruk's study 35% of the respondents felt that homoeopathy was due to the placebo effect but the majority 65% felt that it was not.

Asians and Whites were more likely to believe that homoeopathic medicine was a form of placebo treatment whereas Indians were most likely to believe that homoeopathy was not due to the placebo effect. This may indicate a positive view amongst the Indian respondents towards the effectiveness of homoeopathic medicines.

5.5.6 Question 19: If you answered 'YES' to the above question, which statement best explains your reasoning?

The strongest perception (13 answers) towards this question was that the substances are too dilute to have an effect. The second highest response (10 answers) was that homoeopathy was a form of placebo medicine because improvement or cure is only temporary. A smaller number of the respondents said that they thought the homoeopathic medicines have no medicinal properties; that homoeopathic medicines are simply sugar pills, that research has found it to be a form of placebo treatment and that natural substances are unable to treat illness.

Many people suggest that the benefits of homoeopathic treatment are derived from placebo effect, however, Cummings and Ullman (1986:17) state that homoeopathic literature has recorded many successes in the treatment of seriously ill infants and all kinds of animals, presumably not responsive to the placebo effect.

5.5.7 Question 20: Do you believe that the public generally accepts homoeopathy as a form of medical treatment?

Sixty five percent of the respondents felt that the public generally does not accept homoeopathy while the remaining 35% felt that homoeopathy is accepted. The two universities were very similar in their views.

5.5.8 Question 21: Mark the blocks that you believe provide the best reasons why homoeopathy is not accepted.

Reasons as to why the public generally does not accept homoeopathy:

- Lack of understanding of homoeopathy (38%)
- The medication can be harmful (8%)
- Homoeopathic and allopathic medication cannot be used concurrently (4%)
- Inadequate marketing of homoeopathy (20%)
- Its effectiveness is unproven (14%)

- Homoeopathy is unaffordable (3%)
- Homoeopathy does not work (3%)
- Homoeopathy has no scientific basis (10%)

A high percentage (38%) of the respondents felt that homoeopathy is not accepted by the public because there is lack of understanding and 20% felt it was due to inadequate marketing. In the dendrogram analysis (see Table 4.11) Cluster 2 illustrates this point. The respondents identify a lack of knowledge of homoeopathy with inadequate marketing and hence there is a need for further marketing of homoeopathy so more people can be exposed to its potential benefits.

In this question, the respondents that felt that homoeopathy is not accepted by the general public because it has no scientific basis and because its effectiveness is unproven (sub-Cluster 2) ties in with Question 14 and 15 where 15% of respondents felt homoeopathy has no scientific basis because not enough research has been conducted on it. It is very positive to note that only 3% of the respondents felt that homoeopathy was not accepted because they felt that it does not work.

5.5.9 Question 22: What kind of procedures would you expect a homoeopath to be able to and/or perform on his/her patient?

These responses were divided into three categories:

- Low-level (below 40 responses – no examination, auscultation, dipstick and laboratory tests). In the dendrogram analysis (see Table 4.12) this group forms Cluster 2.
- Mid-level (between 40 and 80 responses – all the system examinations and manipulations). In the dendrogram analysis (see Table 4.12) this group forms Cluster 1.
- High-level (above 80 responses – vital signs, past medical history, family history, social history, and energy healing). In the dendrogram analysis (see Table 4.12) this group forms Cluster 3 and 4.

Cluster 1 shows that the respondents who thought that a homoeopath was able to perform one physical exam were likely to believe that the homoeopath could perform various or all of the physical examinations. Within the duration of the homoeopathic course at the Durban University of Technology and the University of Johannesburg homoeopathic students are taught to conduct all of the physical examinations.

Cluster 3 identifies the taking of the family, social and past medical history. The respondents also tended to group the checking of the vital signs with the taking of

the case history. Cluster 1 and 3 correctly identify procedures that a homoeopath can perform. Homoeopaths are taught case taking where they take a detailed, family, social and past medical history. Homoeopaths are able to send for laboratory tests and are taught how to interpret the results.

Among the respondents' perceptions of the procedures that a homoeopath is able to perform, energy healing is interesting. Ninety-six of the respondents thought that homoeopaths perform energy healing techniques. Homoeopaths do not perform energy healing techniques but the medicine itself is energetic (De Schepper, 2001:14,27). In the dendrogram analysis, Cluster 4 shows that respondents that thought homoeopaths perform energy healing techniques were also likely to think that homoeopaths performed adjustments and manipulations. A high number of respondents (56 respondents) thought that a homoeopath should be able to perform adjustments and manipulations. Homoeopaths do not perform adjustments and manipulation. This technique is related to the chiropractic and physiotherapy professions. It is interesting to note that more respondents think that a homoeopath should be able to adjust/manipulate than conduct a urine dipstick test (30 respondents). This could be due to confusion arising from the knowledge that homoeopaths and chiropractors train in the same university programme or a lack of differentiation between the two professions.

5.5.10 Question 23: Homoeopathic treatment may be useful in which of the following complaints?

The three lowest level responses from the medical respondents were emergency care and trauma, viral and bacterial disease and parasite infestation. This reflects the perception that a clear bio-medical cause (e.g. parasite, virus, bacteria or trauma) is unsuitable for treatment by homoeopathy. This is not necessarily a reflection of the seriousness of the disease i.e. more respondents felt homoeopathy might be useful in the treatment of cancer than in parasite infestation.

In the dendrogram analysis, Cluster 1 shows that the respondents that answered emergency care were also likely to answer that homoeopaths can treat neurological disease, pyrexia, inflammatory disease, cancer, back pain and pregnancy. The nature of this Cluster shows that it is perceived that homoeopathy can treat a wide range of conditions as there is no specific area or system focused upon in this Cluster.

The highest response given for what a homoeopath can treat was a headache. A headache is often viewed as a mild disease and not very difficult to treat and yet, Cummings and Ullman (1986:167) said that in fact headaches account for more doctors' visits than any other single health condition.

A significant number of respondents felt that homoeopathy could treat back pain. This relates to the previous question where a large number of respondents felt homoeopaths perform adjustments and manipulations. This could indicate a confusion that exists between the role and function of homoeopaths and chiropractors.

This perception that homoeopathy is effective in the treatment of headaches and back pain is echoed in other studies. It was found in the study conducted by Eisenberg *et al.* (2001) that CAM therapies were perceived to be more helpful than conventional medical care for chronic, debilitating conditions such as headaches and neck and back conditions. Furthermore, in the study conducted by Singh, Raidoo and Harries among the Indian community it showed that CAM use was highest for headaches (22%) as well as for backache (16%).

It is interesting to note that a high percentage of the respondents also acknowledged that homoeopathy is capable of treating any disease or disorder. In the dendrogram analysis this is represented by Cluster 2. One of the fundamental tenets of homoeopathy is that it does not treat a disease, but a patient with a disease (De Schepper, 2001:42). In the study conducted by Paruk (2005), 90% of respondents felt that homoeopathy should be offered as a treatment for most medical treatments.

Cluster 3 shows that if the respondents thought homoeopathy could treat headaches they also thought that it could treat viral and bacterial disease, psychological disease, psychomotor disease, mechanical injury and parasite infestation. This Cluster shows no specific pattern and therefore no conclusion can be drawn from this Cluster.

5.5.11 Question 24: Do you believe that homoeopathic medications can cause side effects?

The majority (72%) of the respondents felt that homoeopathic medications can cause side-effects. This reflects a perception that homoeopathy is a serious form of treatment and as such has risks associated. Only 8% felt that there were no side-effects and 20% were unsure.

From the UCT the majority (80%) of the respondents said 'Yes' homoeopathic medication can cause side effects, with only 10% answering 'No'. From the UKZN, 64% of the respondents said homoeopathic medication can cause side effects, while 6% said 'No'. This seems to indicate better knowledge of homoeopathic medicines on the part of the UKZN respondents.

While homoeopathic medications do not cause side-effects, they can cause what are called "aggravations," usually a temporary intensification of the patient's symptoms on the way to cure (De Schepper, 2001:5).

In the correlation analysis White and Indian respondents were most likely to feel that homoeopathic medication can cause side effects. Coloureds were the least likely to feel that homoeopathic medication can cause side-effects especially at the UKZN. It is possible that some of the respondents are referring to the “homoeopathic aggravation” even though it is not a side-effect in the classical sense. It is also possible that they may feel that all medicines cause side-effects, orthodox or not, because almost all of the medicines that they may learn about in the medical profession do have side-effects and so it may be hard to imagine a form of medicine without side-effects. As seen in the questions below, many of the respondents confuse homoeopathy with herbalism, and herbal medicines may lead to toxicity and side-effects whereas homoeopathic medicines do not (De Schepper, 2001:45-46).

5.5.12 Question 25: Do you believe that when taking prescription medicine there is a greater risk, similar risk or less risk of suffering from side effects compared to taking homoeopathic medication?

Fifty three percent of the respondents are of the opinion that the risk of side-effects are the same in the two treatments, with 28% believing there is a greater risk of side-effects from prescription medicines, and 19% being of the opinion that there is less risk from prescription medicines.

In the study conducted by Singh, Raidoo and Haries, 2004, 23% of the respondents said that CAM was a natural and safe form of medical care whilst 16% chose CAM because modern medicine carried a risk of unwanted side-effects. Furnham (2002) addressed the issue of comparative risk and found that many participants talked of “naturalness” and hence the safety of complementary therapies that, unlike conventional therapies, did not produce unpleasant side-effects.

5.5.13 Question 26: Mark the box that you believe best describes a homoeopathic medicine

The high percentage (43%) of respondents who gave the correct answer to this question may be due to the way in which the correct option was worded. It was slightly longer than the other options and the nature of the wording was more descriptive. This may have biased some of the respondents towards answering this option.

In general, however, there was confusion between homoeopathy and herbalism. Twenty four percent of the respondents thought that a homoeopathic medicine could best be described as ‘crushed and preserved herbal plants in their raw form’. This relates to Question 17 in which a high percentage (69%) of respondents felt that the study of herbal medicines is required in order to become a registered homoeopathic practitioner in South Africa.

Herbalism is often lumped together with homoeopathy, but it is actually much closer to allopathic medicine in its principle of remedy action. The herbs are used in their material dose. The material dose of herbs often leads to toxicity, a problem of allopathic and not homoeopathic medicine. Most herbals are also mixtures, whose long term effects are difficult to predict (De Schepper, 2001:45-46).

Thirty-two percent of respondents thought that a homoeopathic medicine is all natural substances taken in any form. This is a common misconception; it is believed that if a medicine is natural then it can be classified as homoeopathic. This concept is incorrect because homoeopathic medicines have a very specific method of production that alters the effect and nature of the medicine.

It is interesting to note the low level (1%) of respondents who felt that sugar pills are the nature of a homoeopathic medicine. This belies an earlier question which showed that roughly 24% of respondents felt that homoeopathic medication is a form of placebo treatment.

5.5.14 Question 27: Do you believe that homoeopathic medication is.....

Respondents were fairly evenly split between the options. There was a slight preponderance of respondents who felt homoeopathy is primarily a supportive medication.

Of the respondents, 28% thought homoeopathy is a supportive medicine, 28% palliative medicine, 23% supplementation to allopathic medicine, 18% preventative medicine and 12% primary care medicine.

5.5.15 Question 28: Is there a difference between homoeopathy and.....

The relatively high level of differentiation between homoeopathy and the other alternative modalities could possibly be due to the nature of the question i.e. if a question is being asked then there must be a difference.

Another point worth noting is that the least differentiated of the alternative systems are also the least defined. This is evident in the difference between the responses between naturopathy (100% perceived a difference) and herbalism (98.8% perceived a difference). Traditional African medicine, aromatherapy and reflexology likewise are not well defined as systems. It is interesting to note though that homoeopathy is perceived to have more in common with traditional African medicine than with naturopathy and vitamin and mineral supplementation!

5.5.16 Question 29: Do you believe that a homoeopath is a skilled primary care practitioner?

Thirty eight percent of respondents thought a homoeopath is a skilled primary care practitioner whereas 23% felt that that they are not and 39% were unsure. This gave a relatively even split between the three categories. This gives the perception that respondents are unsure of the status of homoeopathic practitioners and the role they should play in health care.

In Question 27 only 12% of respondents felt that homoeopathic medicine was primary care medicine compared to 38% in this question who believe homoeopaths to be skilled primary care practitioners. This may suggest that the respondents have more belief in the homoeopathic practitioner than the medicines that they prescribe. It may also suggest a confusion or lack of understanding about homoeopathy and its practice leading to inconsistent answering.

A greater percentage (43%) of the UKZN respondents believed that homoeopaths are primary skilled practitioners compared to 34% of respondents from the UCT whereas more respondents from the UCT had been treated by a homoeopath. Thirty seven percent of respondents from the UCT felt homoeopaths were not skilled primary practitioners compared to only 10% from the UKZN.

According to Maharaj (2005), 30% of respondents felt that homoeopaths were skilled primary care practitioners, 33% were unsure and 37% felt that homoeopaths were not skilled primary care practitioners.

Asians and Whites at the UKZN were more likely to believe the homoeopath is a skilled primary care practitioner.

5.5.17 Question 30: Do you believe homoeopathy could be incorporated into hospital care?

Fifty five percent of the respondents felt that homoeopathy could be incorporated into the hospital care paradigm. This could indicate a perception of homoeopathy as being a useful tool in the core areas of hospital care (reducing mortality and morbidity, decreasing recovery time etc) or a perception of homoeopathy as a soft option (e.g. reflexology and therapeutic massage) to be used to enhance the overall hospital experience without necessarily being part of the core functions. Further research would be needed to differentiate between the two perspectives. Only 17% felt that it could not be incorporated into hospital care and 28% were unsure.

Teixeira, Lin and Martin (2005) found in their study that 27% of the respondents were receptive to homoeopathy being included into hospital care.

5.6 Part Four: Communication

An enormous commitment is needed to face the challenges of educating the present and upcoming physicians in such a way that they can comprehend CAM sufficiently to make effective referrals; receive and direct communication among themselves, CAM providers, and patients. The goal is to have knowledgeable physicians who would be comfortable in prescribing a course of treatment that includes CAM modalities when appropriate. To do so would create a more comprehensive approach that ultimately benefits the patient. In order to accomplish this, the physician must have a basic level of familiarity with CAM approaches. Often patients want and need some guidance in these areas and welcome the opportunity to confer with their doctors about these approaches once they realise that the doctors are able and willing to do so openly and objectively (Konefal, 2002).

5.6.1 Question 31: Do you believe improved communication and cooperation between general practitioner and homoeopath would benefit the patient?

The majority of respondents (79%) felt that it is important for there to be improved communication. This is similar to the findings of Maharajh (2005) where 81% of general practitioners and pharmacists thought that it was important.

In this study only 8% said 'No' and 13% were 'Unsure'. The results from the two universities were very similar. Eighty percent of the UCT respondents felt it was important compared to 78% from the UKZN. This shows that both universities felt strongly that improved communication is vital.

It is through better communication that more understanding will be gained by both parties and this will essentially be in the best interest of the patient. The two therapies can be complementary of each other instead of continually opposite ends of the spectrum.

According to Baugniet, Boon and Østbyte (2000) and Hasen, Das and Behjat (2000) there was a clear willingness of the medical students and general practitioners that participated in the respective studies to discuss CAM with their patients.

On the other hand, the study conducted by Singh, Raidoo and Harries (2004) with the Chatsworth community, 42% informed their doctors whereas 54% did not inform their doctors of their CAM use. The reasons given were that 54% thought it was unnecessary, 7% felt the doctor might become upset, and 29% stated that their doctor did not enquire.

It is not only the attitude of the doctors that need to change but that of the patient so better communication can be established between the two parties.

5.6.2 Question 32: When you are qualified would you consider referring to or working with a homoeopath to treat a patient?

Sixty three percent of the respondents said they would refer, 16% said that would not and 16% were unsure. Sixty three percent of the UCT respondents said that they would refer, 19% said would not and 18% were unsure. This was similar to the results from the UKZN where 60% said they would refer, 12% said they would not and 28% were unsure. This is a very positive result considering that the clear majority of respondents said that they would refer to a homoeopath. This indicates a view of homoeopathy as being useful and needed as another option in health care.

5.6.3 Question 33: When you establish your practice would you consider sharing premises with a practitioner registered with the Allied Health Professions Council?

The majority of respondents said that they would share premises with a practitioner registered with the Allied Health Professions council. Seventy one percent of the UCT respondents said they would share premises compared to 60% from the UKZN. Whites at the UKZN were most likely to be willing to share premises in the future.

5.6.4 Question 34: Do you believe it is important for a medical doctor to know about alternative forms of treatment?

Most of the respondents (92%) felt it is important for a medical doctor to know about alternative forms of treatment. Ninety three percent from the UCT and 91% from the UKZN thought it was important. It is excellent to see that these respondents are open minded and realise that it is necessary to work together, and it is also important to have a well-rounded knowledge so as to become a better practitioner.

5.6.5 Question 35: In the future would you consider incorporating homoeopathy into your practice?

Thirty eight percent said they would consider using homoeopathy in the future. Thirty eight percent also were unsure and 23% felt that they would not use homoeopathy. It is encouraging to see that many of the respondents are willing to use homoeopathy in their practice. It indicates an interest in improving their own learning and possibly their own results in that they may have another option of therapy if they are not successful with a patient.

In the study conducted by Turner, 79% of veterinarians thought that homoeopathy has a role to play in veterinary medicine.

5.6.6 Question 36: If a medical doctor wants to prescribe homoeopathic medicines effectively what training do you believe they require?

Sixty one percent of respondents recognise that a fairly involved training course is necessary to be able to prescribe homoeopathic remedies effectively. This reflects the perception that homoeopathy is a serious discipline.

According to Baugniet, Boon and Østbyte (2000), more than two thirds of respondents from all health care faculties involved in the research were interested in receiving training to practice a form of CAM, with the exception of the medicine students, who expressed the lowest interest.

5.6.7 Question 37: Which of the following best reflects your view of homoeopathy?

The most common responses show a balance between cautious optimism and non-committal approval. The majority of respondents felt that homoeopathy has a place in the treatment of patients and a very small percentage felt that homoeopathy was quackery and does more harm than good or that it is of no benefit to the patient.

In the dendrogram analysis (see Table 4.14) Cluster 2 shows that the respondents that feel that they are not informed enough to comment on

homoeopathy also feel that more research needs to be conducted to prove its effectiveness. This Cluster shows there needs to be more attention drawn to the researches that have already been conducted on homoeopathy and the results that show its effectiveness. Cluster 3 identifies respondents that are unsure of homoeopathy's place in health care but are willing to acknowledge that it has a place and some form of benefit to the patient.

5.7 Comments

At the end of the questionnaire the respondents were able to add any comments.

There was a very positive response from the respondents. The comments demonstrated an openness and willingness to learn more about homoeopathy. They acknowledged that homoeopaths have a role to play in healthcare even if they are unclear on what role homoeopathy should play.

This study shows from its results as well as the comments from the respondents that a module or course on alternative medicine needs to be incorporated into the medical curriculum.

5.8 Critique

Within some of the respondent's comments was also a critique of the questionnaire. One respondent felt that there should be a definition page. The reason one was not included was to gauge how much knowledge and understanding the medical respondents had on alternative medicine without giving them any information first. On reflection a definition page could be included into the questionnaire because it was impossible for some of the respondents to comment on certain questions due to lack of understanding of the terminology. In future a basic definition page could be included into the questionnaire.

Another respondent felt that the questions were difficult to answer and more 'Yes' and 'No' questions should be included. The questionnaire was quite long and involved and perhaps simplification is necessary for any further studies using this format. Initially it was perceived by the researcher that simple 'Yes' and 'No' answers would not give enough insight into the true perceptions of the respondents but a better structured questionnaire would be able to illicit perhaps even more information.

The questionnaire needed to be shorter, simpler and more direct in its questions. The focus should have been on general understanding instead of focusing on finding out specific detail. The respondents may have had a general

understanding of homoeopathy but the questionnaire was complicated and therefore respondents did not answer certain sections that involved specific knowledge as they were unsure of the answers. The questionnaire could have been structured differently so that respondents that had a limited knowledge could answer the first few sections and if they felt they had a good understanding of homoeopathy go on to complete further section that required more specific understanding of how homoeopathy works.

The research needed to be conducted in the beginning of the year when the medical students were not yet in the hospitals and had more free time available. If done in future it could be better coordinated with the medical school so that a lecture slot could be incorporated into the medical student's timetable for the purpose of completing the questionnaire. In this lecture period the questionnaire could be completed and then a short talk on homoeopathy could be given to the students. This would be a mutually beneficial situation, the researcher could have access to the students, the students would learn about homoeopathy and the students would be allocated time to complete the questionnaire and not feel as if they have to rush through the questionnaire.

It is only on reflection that it is realised what needed to be changed but research is an ongoing evolutionary cycle whereby improvement can always be sought and found.

CHAPTER 6

6 CONCLUSIONS AND RECOMMENDATIONS

6.1 Conclusions

The results of this survey provide data on the perception of 3rd year medical students from the University of Cape Town and the University of KwaZulu Natal, towards homoeopathy. The respondents portrayed genuine interest, curiosity and desire to know more about homoeopathy and its potential as a component of their medical practice. The respondents had a positive and accepting attitude towards homoeopathy, but lack of knowledge of homoeopathy was clearly evident.

The fairly low response rate from the respondents may indicate that the results of the study may not be as representative of the third year medical student's perceptions as the researcher would hope them to be.

It is very encouraging to note that 96% of the respondents surveyed had heard of homoeopathy. It is an indication that the awareness towards alternative forms of treatment is growing amongst the medical community. There was also a definite perception that more needs to be done to inform the public as well as the medical

students about homoeopathy. One way that this can be accomplished is through better communication and interaction between allopath and homoeopath.

Even though the majority of the respondents said they had heard of homoeopathy and 20% felt that they were familiar with it, there was still a large divide between perceived knowledge and accurate knowledge about homoeopathy. The respondents generally had limited knowledge on homoeopathic training, the length of time it takes to qualify as a homoeopath, how it is recognised by the law and what constitutes a homoeopathic medicine. There is an undeniable need to initiate educational programmes within the medical curriculum as interest in homoeopathy is evident, 68% of the respondents had a desire in learning more about homoeopathy. The educational programs for the medical students need to be formatted so that they fit the criteria and fulfil the high standards set by the tertiary institutions and homoeopathic organisations in South Africa. Educational programmes can increase awareness of homoeopathy and its potential usefulness, so that it may be incorporated into the medical paradigm. Medical practitioners, as well as the general public, need to be able to have the ability to make an informed decision based on sound knowledge. Educational programmes will provide more people with that opportunity.

A small percentage of respondents felt that homoeopathic medication was a form of placebo treatment due to the fact that the medicines are diluted substantially.

This is a common misconception that exists among the general public and a topic that needs to be addressed and explained. Once people are given an accurate description on the processes that occur in the production of the homoeopathic medicines and how these medicines are not merely diluted but are potentised through the process of succussion into an energetic medicine, it is highly possible that this perception will change.

Another misconception highlighted in this study was that homoeopaths perform manipulations and adjustments and hence it is a good mode of treatment for back pain. This form of treatment is associated with the chiropractic, osteopathy and physiotherapy professions. Educational programmes can develop and establish clear guidelines to show the differences that exist between homoeopathy and these modes of treatment.

In terms of public perception, homoeopathy is at times lumped together with all forms of natural medicine and treatment without recognising its individual philosophy, as was the case by some of the respondents in this study. This is a dangerous misconception that exists, and it may limit the true potential of using homoeopathic treatment effectively. It is dangerous in that not all natural medicines may be safe and reliable, and they may be perceived to be homoeopathic medicines. On the other hand, homoeopathy is itself a safe and reliable method of treatment. It produces no unwarranted side-effects when used

correctly, and the effects it has on the body can be monitored and predicted by trained practitioners.

The majority of respondents indicated the media as their main source of knowledge. This could potentially lead to further studies on how to market homoeopathy effectively and what would be the best method to convey accurate and informative information to the recipient.

This study provides valuable information on the feelings and attitudes of medical students towards homoeopathy. It also illustrates a gap in understanding and knowledge regarding this topic. It points out that there is need for reform in the health care system in South Africa. Working relationships need to be established between orthodox and complementary organisations and those who belong to and work in the profession. It is possible to have a future healthcare that will see allopathy and homoeopathy once again walking hand in hand, as they once did in the past (Vithoulkas, 1980:xi).

6.2 Recommendations

The following recommendations are made:

- 1) This study can be used as a comparative study for further investigations into medical student's perceptions towards homoeopathy and their

perception of homoeopathy being incorporated into the medical health care system in South Africa.

- 2) This study was limited to 3rd year medical students from the University of Cape Town and the University of KwaZulu Natal. It is recommended that surveys be conducted at other universities and with more senior medical students. It would be interesting to see if the medical students' opinions change as they progress through the medical curriculum.
- 3) A better return rate could be generated if this study was conducted at the beginning of the year when the medical students have a possibly lighter schedule to follow and the researcher would be allowed class time and hence be able to address the students personally. Other methods could also be employed to ensure a larger sample group.
- 4) Further studies could be conducted using medical practitioners or medical students that are Black to determine their perceptions of homoeopathy verses those of traditional African medicine.
- 5) Instead of limiting the research to medical students it could include students in the other medical fields from various faculties such as physiotherapy, nursing, occupational therapy etc. and use comparative

analysis to see if there is a difference in knowledge and perceptions between these faculties.

- 6) Research could also be conducted on medical doctors who have studied homoeopathy, and who use homoeopathy in their practices and whether it has had a positive or negative effect on their practice and if their views on treating disease have changed.
- 7) A different questionnaire could be drawn up that is able to elicit better responses from the students. The questionnaire could be simplified and worded more clearly. The introduction should include a definition page for difficult terminology. The questionnaire could have mainly 'Yes' and 'No' questions.
- 8) Comparison of South African orthodox medical practitioners and homoeopaths perceptions towards disease and treatment could be done.
- 9) Research with regards to the awareness of homoeopathy both in terms of healthcare and as a career choice needs to be conducted especially in the Black community.

10) Finally, it is recommended that a module on homoeopathy is introduced into the medical school curriculum so that medical students can be educated about homoeopathy.

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Appendix A

**Letter to the University of Cape Town requesting permission to
conduct a survey at their university**

P O Box 1334
Durban
4001
03 June 2006

The Dean,
Health Sciences Faculty,
University of Cape Town Medical School

Homoeopathy is a complementary form of therapy. We do not know much about what South African medical students know and think about homoeopathy. This led me to develop a research survey among medical students to establish their perception of homoeopathy. The title of my research is: **A survey to determine the perceptions of the third year medical students at the University of Cape Town and the University of KwaZulu Natal towards homoeopathy.**

This survey will be for the completion of my Master's degree in Technology: Homoeopathy at the Durban University of Technology.

Medical students represent the future of health care professionals in our country, and their opinions on this subject of complementary health will be of great value.

I have received ethical approval from my Institution, Durban University of Technology. **Your ethics committee has requested that before I get full approval to go ahead with the survey I need to receive a letter of permission from you, the Dean of the Medical School.**

It will be made clear to each student participating in this survey that it is not compulsory and the questionnaire will be filled out on a voluntary basis. Students will not be asked to supply their names, addresses or any other information that will allow identification. There will be no way of identifying respondents from their returned questionnaire and therefore the student's answers will be completely anonymous and strictly confidential. The student will provide their consent to take part in this research by returning a completed questionnaire. The questionnaires will be stored at the Durban University of Technology for a period of 5 years and then shredded/ destroyed.

Thank you for your help regarding this matter.

Sara Thorvaldsen
Researcher
084 226 5556

Dr Richard Steele B.A., H.D.E., M.Tech. Homoeopathy
Supervisor
(031) 332 6060 (w) 082 928 6208

Appendix B

**Letter to the University of KwaZulu Natal requesting permission to
conduct a survey at their university**

P O Box 1334
Durban
4001
08 September 2006

The Dean, Nelson R. Mandela School of Medicine

Homoeopathy is a complementary form of therapy. We do not know much about what South African medical students know and think about homoeopathy. This led me to develop a research survey among medical students to establish their perception of homoeopathy. The title of my research is: **A survey to determine the perception of the third year medical students at the University of Cape Town and the University of KwaZulu Natal towards homoeopathy.**

This survey will be for the completion of my Master's degree in Technology: Homoeopathy at the Durban University of Technology.

Medical students represent the future of health care professionals in our country, and their opinions on this subject of complementary health will be of great value.

I have received ethical approval from my Institution, Durban University of Technology. The questionnaire has also been approved by the University of Cape Town ethics committee. I sent in my application form to the biomedical ethics committee at your University, the University of KwaZulu Natal. It was approved with minor changes. **Your ethics committee has requested that before I get full approval to go ahead with the survey I need to receive a letter of permission from you, the Dean of the Medical School.**

It will be made clear to each student participating in this survey that it is not compulsory and the questionnaire will be filled out on a voluntary basis. Students will not be asked to supply their names, addresses or any other information that will allow identification. There will be no way of identifying respondents from their returned questionnaire and therefore the student's answers will be completely anonymous and strictly confidential. The student will provide their consent to take part in this research by returning a completed questionnaire. The questionnaires will be stored at the Durban University of Technology for a period of 5 years and then shredded/ destroyed.

Thank you for your help regarding this matter.

Sara Thorvaldsen
Researcher
084 226 5556

Dr Richard Steele B.A., H.D.E., M.Tech. Homoeopathy
Supervisor
(031) 332 6060 (w) 082 928 6208

Appendix C

Covering letter to participants introducing the survey

Dear Medical Student

Homoeopathy is a complementary therapy. We do not know much about what South African medical students know and think about homoeopathy. This led me to develop a research survey among medical students to establish your perceptions of homoeopathy.

You, as a medical student, represent the future health care professional of our country, and I value your opinion in this subject of complementary therapy.

I would like you to complete the attached questionnaire in full, which should not take longer than 15 minutes. Questions can be answered by placing an X in the block next to the answer of your choice.

Your decision to participate in this survey is greatly valued and voluntary. If you do choose to take part in this survey and assist me in my research your answers will be completely anonymous and strictly confidential. By completing the questionnaire you provide your consent to participate in the study.

Your answers will help us greatly to provide more information on homoeopathy and to market the study of homoeopathy more appropriately.

Yours sincerely

Sara Thorvaldsen

Appendix D

Instruction to participants on how to complete the questionnaire

**QUESTIONNAIRE ON MEDICAL STUDENTS PERCEPTIONS OF
HOMOEOPATHY.**

INSTRUCTIONS:

- 1 This questionnaire consists on seven pages. Please answer all 37 questions on the attached 7 pages.**
- 2 Please read each question carefully before you answer it.**
- 3 Please mark the appropriate box in each question that best describes your answer with an X.**
- 4 Your answers will be regarded as strictly confidential.**

Appendix E

Questionnaire

PERCEPTIONS TOWARD HOMOEOPATHY QUESTIONNAIRE

(Adapted from D. Maharajh, 2005 and D. Small, 2004)

Please answer by placing an 'X' in the appropriate box

PART ONE: PERSONAL INFORMATION

1. Gender:

FEMALE	MALE
---------------	-------------

2. Age (in years):

17-20	21-25	26-30	31-35	36-40	41 +
--------------	--------------	--------------	--------------	--------------	-------------

3. Ethnicity: (for statistical purposes only)

ASIAN	BLACK	COLOURED	INDIAN	WHITE	OTHER
--------------	--------------	-----------------	---------------	--------------	--------------

4. Which University do you attend?

UNIVERSITY OF KWAZULU-NATAL	UNIVERSITY OF CAPE TOWN
------------------------------------	--------------------------------

5. Year of study of medicine that you are in:

1st	2nd	3rd	4th	5th	6th
------------	-----------------------	-----------------------	------------	------------	------------

PART TWO: KNOWLEDGE OF HOMOEOPATHY

6. How would you describe your knowledge of homoeopathy?

NEVER HEARD OF IT	
HEARD OF IT BY NAME ONLY	
KNOW SOMETHING ABOUT IT	
FAMILIAR WITH IT	
KNOW ALOT ABOUT IT	

6.1. If you have heard of homoeopathy before, where did you hear about it?

UNIVERSITY	MEDIA	FAMILY	FRIENDS	DOCTOR	OTHER
-------------------	--------------	---------------	----------------	---------------	--------------

7. Is there a module on homoeopathy incorporated into your course?

YES	NO	UNSURE
------------	-----------	---------------

8. Would you be interested in finding out more about homoeopathy?

YES	NO	UNSURE
------------	-----------	---------------

9. Have you ever been treated by a homoeopath?

YES	NO
------------	-----------

10. Do you know if there are any training courses available in South Africa for people to become homoeopaths?

YES	NO	UNSURE
------------	-----------	---------------

11. Indicate how many years you believe it requires to qualify as a homoeopath.

1 YEAR CERTIFICATE	3 YEAR DIPLOMA	4 YEAR DEGREE	5 YEAR MASTERS DEGREE AND INTERNSHIP
-------------------------------	-----------------------	----------------------	---

12. Is homoeopathy recognised by law in South Africa?

YES	NO	UNSURE
------------	-----------	---------------

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

YES	NO	UNSURE
------------	-----------	---------------

PART THREE: PERCEPTIONS OF HOMOEOPATHY

14. Do you believe homoeopathy has any scientific basis?

YES	NO	UNSURE
------------	-----------	---------------

15. If you answered 'NO' to the above question, which statement explains your reasoning best?

NOT ENOUGH RESEARCH HAS BEEN CONDUCTED	
EVIDENCE IS NOT RELIABLE	
HOMOEOPATHY IS BASED ON UNFOUNDED MEDICAL PRINCIPLES	
HOMOEOPATHY AND SCIENCE HAVE NO RELATION	
OTHER, PLEASE SPECIFY: _____ _____	

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

YES	NO	UNSURE
------------	-----------	---------------

17. What does the study of homoeopathy in South Africa entail to become a registered homoeopathic practitioner?

(You may choose more than one)

MEDICAL SCIENCES (e.g. Anatomy, physiology, biochemistry etc)	
GENERAL AND SYSTEMIC PATHOLOGY	
IRIDOLOGY	
MEDICAL PHARMACOLOGY	
HOMOEOPATHIC MEDICINES	
HERBAL MEDICINES	
REFLEXOLOGY	
USE OF A PENDULUM	
THERAPEUTIC MASSAGE	
DIAGNOSTICS	
MINOR SURGERY	
PSYCHOPATHOLOGY	
ANESTHESIA	

18. Do you believe homoeopathic medicine to be a form of placebo treatment?

YES	NO	UNSURE
------------	-----------	---------------

19. If you answered 'YES' to the above question, which statements best explain your reasoning?
(You may choose more than one)

THE HOMOEOPATHIC MEDICINES HAVE NO MEDICINAL PROPERTIES	
THE SUBSTANCES ARE TOO DILUTED TO HAVE AN EFFECT	
HOMOEOPATHIC MEDICINES ARE SIMPLY SUGAR PILLS	
NATURAL SUBSTANCES ARE UNABLE TO TREAT ILLNESS	
RESEARCH HAS FOUND IT TO BE A FORM OF PLACEBO TREATMENT	
IMPROVEMENT OR CURE IS ONLY TEMPORARY	
OTHER, PLEASE SPECIFY _____ _____	

20. Do you believe that the public generally accepts homoeopathy as a form of medical treatment?

If NO, proceed to question 21. If YES, proceed to question 22.

YES	NO
------------	-----------

21. Mark the blocks that you believe provide the best reasons why homoeopathy is not accepted.
(You may choose more than one)

LACK OF UNDERSTANDING OF HOMOEOPATHY	
THE MEDICATION CAN BE HARMFUL	
HOMOEOPATHIC AND ALLOPATHIC MEDICATION CANNOT BE USED CONCURRENTLY	
INADEQUATE MARKETING OF HOMOEOPATHY	
IT'S EFFECTIVENESS IS UNPROVEN	
HOMOEOPATHY IS UNAFFORDABLE	
HOMOEOPATHY DOES NOT WORK	
HOMOEOPATHY HAS NO SCIENTIFIC BASIS	

22. What kind of procedures would you expect a homoeopath to be able to and/or perform on his/her patient?

(You may choose more than one)

CHECK THE VITAL SIGNS	
CARDIOVASCULAR EXAMINATION	
RESPIRATORY EXAMINATION	
OPHTHALMIC EXAMINATION	
NEUROLOGICAL EXAMINATION	
ABDOMINAL EXAMINATION	
MUSCULO-SKELETAL EXAMINATION	
GENITO-URINARY EXAMINATION	
NO EXAMINATION	
TAKE A PAST MEDICAL HISTORY	
TAKE A FAMILY HISTORY	
TAKE A SOCIAL HISTORY	
AUSCULTATION	
LABORATORY TEST	
URINE DIP-STICK	
ENERGY HEALING	
ADJUSTMENTS AND MANIPULATIONS	

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

(You may choose more than one)

ANY DISEASE OR DISORDER	
HEADACHE	
MECHANICAL INJURY	
PREGNANCY	
EMERGENCY CARE/TRAUMA	
PSYCHOLOGICAL DISEASE	
PSYCHOMOTOR DISEASE	
AUTO-IMMUNE DISEASE	
INFLAMMATORY DISEASE	
PYREXIA	
VIRAL AND BACTERIAL DISEASE	
BACK PAIN	
CANCER	
NEUROLOGICAL DISEASE	
PARASITE INFESTATION	
BRUISING AND JOINT PAIN	

24. Do you believe that homoeopathic medications can cause side-effects?

YES	NO	UNSURE
------------	-----------	---------------

25. Do you believe that when taking prescription medicine there is a greater risk, similar risk or less risk of suffering from side-effects compared to taking homoeopathic medication?

GREATER RISK	SAME RISK	LESS RISK
---------------------	------------------	------------------

26. Mark the box that you believe best describes a homoeopathic medicine.

CRUSHED AND PRESERVED HERBAL PLANTS IN THEIR RAW FORM	
SPECIFICALLY PREPARED, SUCUSED AND DILUTED PLANT, MINERAL AND ANIMAL SUBSTANCES	
ALL NATURAL SUBSTANCES TAKEN IN ANY FORM	
SUGAR PILLS WITH NO ACTIVE MEDICINAL PROPERTIES	

27. Do you believe that homoeopathic medicine is
(You can choose more than one)

	YES	NO
PREVENTATIVE MEDICINE		
PRIMARY CARE MEDICINE		
SUPPORTATIVE MEDICINE		
SUPPLEMENTATION TO ALLOPATHIC MEDICINE		
PALLIATIVE MEDICINE		

28. Is there a difference between homoeopathy and.....

	YES	NO
HERBALISM		
TRADITIONAL AFRICAN MEDICINE		
AROMATHERAPY		
REFLEXOLOGY		
NATUROPATHY		
ACUPUNCTURE		
IRIDOLOGY		
AYURVEDIC MEDICINE		
VITAMIN AND MINERAL SUPPLEMENTATION		
THERAPEUTIC MASSAGE		

29. Do you believe that a homoeopath is a skilled primary care practitioner?

YES	NO	UNSURE
------------	-----------	---------------

30. Do you believe homoeopathy could be incorporated into hospital care?

YES	NO	UNSURE
------------	-----------	---------------

PART FOUR: COMMUNICATION

31. Do you believe improved communication and co-operation between general practitioners and homoeopaths would benefit the patient?

YES	NO	UNSURE
------------	-----------	---------------

32. When you are qualified would you consider referring to or working with a homoeopath to treat a patient?

YES	NO	UNSURE
------------	-----------	---------------

33. When you establish your practice would you consider sharing premises with a practitioner registered with the Allied Health Professions Council?

YES	NO	UNSURE
------------	-----------	---------------

34. Do you believe it is important for a medical doctor to know about alternative forms of treatment?

YES	NO	UNSURE
------------	-----------	---------------

35. In the future would you consider incorporating homoeopathy into your practice?

YES	NO	UNSURE
------------	-----------	---------------

36. If a medical doctor wants to prescribe homoeopathic medicines effectively what training do you believe they require?

NO TRAINING	WEEKEND COURSES	1 YEAR CERTIFICATE	3 YEAR DIPLOMA	OTHER
--------------------	------------------------	---------------------------	-----------------------	--------------

If other, please list:

37. Which of the following best reflects your view of homoeopathy?
(You may choose more than one)

I AM UNCOMFORTABLE WITH IT, BUT IT IS EFFECTIVE FOR SOME PATIENTS	
I FEEL THAT IT HAS A PLACE IN THE TREATMENT OF PATIENTS	
I AM NOT INFORMED ENOUGH TO COMMENT	
IT IS QUACKERY AND DOES MORE HARM THAN GOOD	
I DO NOT BELIEVE THAT IT IS OF ANY BENEFIT TO PATIENTS	
I FEEL THAT MORE RESEARCH NEEDS TO BE CONDUCTED TO PROVE ITS EFFECTIVENESS	
IT IS AN EXCELLENT MODE OF TREATMENT	

If you would like to add any comments, please do so in the space provided below.
If you are commenting on a specific question please specify the question number.

THANK YOU FOR PARTICIPATING IN THIS STUDY