

RESEARCH INTO THE EXPERIENCE OF HOLISM AND
WELLNESS
IN CHIROPRACTIC HEALTH CARE

BY

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BOTH IN CONCEPTION AND EXECUTION

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*"YOU ARE
NEVER GIVEN A WISH
WITHOUT ALSO BEING GIVEN THE
POWER TO MAKE IT TRUE.*

*YOU MAY HAVE TO WORK
AT IT HOWEVER. "*

- RICHARD BACH.

(i)

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ABSTRACT

This study was aimed at establishing the degree to which the concept of holism and the practise of wellness formed part of chiropractic health care. It set out to discover how patients and practitioners perceived holism, and to determine the degree to which the practice of wellness was incorporated into patient management programmes.

The study ultimately integrated and evaluated the responses of two questionnaires. One was directed at patients in order to recognize how they perceived holism and wellness in chiropractic health care, and the other was directed to practitioners to discover the extent to which holism and the practice of wellness were incorporated into their patient management programmes.

Throughout this study, holism was viewed as a philosophical concept acknowledging an interdependence of mind and body. On the other hand, the term wellness was used in reference to a form of patient management based on the practical application of holistic approach, as opposed to a purely philosophical concept.

For the purpose of this study the concept of holism was evaluated in terms of the following factors; exercise, stress management, religion, emotional well-being, diet and nutrition, smoking, alcohol consumption, medication and drug use and occupational hazards. The data generated by the questionnaires was analyzed by means of frequency tabulation and cross-tabulation. The results were discussed and displayed by means of bar-charts and frequency tables.

These results revealed that both patients and practitioners were very aware of the concept of holism in their personal lives. However, it also revealed that there were inconsistencies between the patients' experience of wellness and the holistic approach supposedly offered by their practitioners. Areas of inconsistency included discussion in the following areas: a) medication and drug use, b) alcohol consumption, c) occupational hazards and d) emotional well-being of patients.

In the final chapter recommendations were made with regards to research methodology for future studies of a similar nature, as well as suggestions for the development of a holistic approach in chiropractic education and health care.

A re-evaluation of chiropractic philosophy and the mission statement of chiropractic health care was suggested, in order to establish what a practitioner's responsibility is towards the community and his/her patients. It was recommended that practitioners and chiropractic students be made aware of their responsibility to humankind as Doctors of Chiropractic.

UITTREKSEL

Die doelwit van hierdie studie was om te bepaal tot watter mate die konsep van holisme en holistiese behandeling deel vorm van chiropraktiese geneeskunde. Dit het beoog om te bepaal hoe pasiënte en praktisyne holisme beskou, en tot watter mate die praktisyne holistiese behandeling in hulle praktyke inkorporeer.

Die finale doelstelling van hierdie studie was om die resultate van twee vraelyste te integreer en te evalueer. Die een vraelys was gerig aan pasiënte in 'n poging om hulle persepsie van holisme in hul eie lewens te ondersoek. Die tweede vraelys was gerig aan praktisyne in 'n poging om te vas te stel tot watter mate die konsep van holisme en die beoefening van hierdie filosofie deel vorm van hul praktyk.

In die studie was holisme beskou as 'n filosofiese konsep wat die interafhanklikheid van liggaam en gees identifiseer. In kontras verwys die term holistiese behandeling na 'n tiepasiënt behartiging wat die holistiese konsept op 'n praktiese manier inkorporeer.

Met betrekking tot hierdie studie was die konsep van holisme ondersoek in terme van die volgende faktore; oefening, hantering van spanning, geloof, emosionele welsyn, dieet en voedingskunde, rook, alkohol verbruik, medikasie en dwelm gebruik en beroeps risiko's.

Vanuit die resultate het dit geblyk dat beide pasiënte en praktisyne bewus was van die konsep van holisme. Die resultate het egter ook onreëlmatighede in die pasiënte se ervaring van holistiese benadering gewys teenoor die holistiese benadering wat praktisyne waarskynlik aan hulle pasiënte offer. Areas van onreëlmatigheid het die bespreking van die volgende aspekte ingesluit: a) medikasie en dwelm gebruik, b) alkohol verbruik, c) beroeps risiko's en d) emosionele welsyn.

Aanbevelings in die slot hoofstuk was gemaak, in 'n poging om riglyne daar te stel vir soortgelyke studies in die toekoms, as ook voorstelle in die ontwikkeling van 'n holistiese benadering in chiropraktiese opvoedkunde en in die praktyk. 'n Her-evalueering van die filosofie en doelstelling van die chiropraktiese professie was aanbeveel, in 'n poging om tot 'n slotsom te kom aangaande die rol van die praktisyne in die gemeenskap en teenoor sy/haar pasiënte. Dit was ook aanbeveel dat praktisyne sowel as chiropraktiese studente bewus gemaak word van die verantwoordelikheid wat hulle, as Dokters van Chiropraktyk het teenoor die mensdom.

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CHAPTER ONE: THE PROBLEM AND ITS SETTING

1.1 STATEMENT OF THE PROBLEMS

This study sets out to establish how patients and practitioners experience holism and wellness in chiropractic health care. It will try to determine the degree to which the concept of holism and the practice of wellness are incorporated into patient management. It also proposes to discover how holism and wellness are perceived by patients and practitioners.

This study ultimately aims to integrate and evaluate the results of two questionnaires. One will be directed at patients in order to recognize how they experience holism and wellness in chiropractic health care, and the other will be directed at practitioners in order to determine the degree to which holism and the practice of wellness are incorporated into their patient management programmes.

1.2 DELIMITATIONS

1.2.1 For patients:

- a) In order to ensure reliability of responses, only patients who have received more than three chiropractic treatments, not longer than six months previously, will be considered for this study.
- b) Family members and relatives of the practitioner will not be allowed to participate in the study, so as to eliminate bias in the completion of the questionnaires.

c) Only patients above the age of 18 will be allowed to complete the questionnaires, as patients of a younger age may have difficulty in understanding the concepts fully.

1.2.2 For practitioners:

a) Only responses from chiropractors practising within the Republic of South Africa will be included in the study.

b) Only members registered with *The Chiropractors, Homeopaths and Allied Health Service Professions Council of South Africa* will be included in the study.

1.3 ASSUMPTIONS IN THE RESEARCH METHODOLOGY

a) It is assumed that all questionnaires will be completed truthfully and objectively.

b) The Systematic Random Sampling method was employed because it was assumed that it would provide samples representative of the normal patient population.

1.4 HYPOTHESES

1.4.1 **Hypothesis One:** that questionnaire results will reveal that the patients received wellness treatment and that patients are aware of holism in their personal lives.

1.4.2 Hypothesis Two: that questionnaire results will reveal that the practitioners employ a wellness approach in their management programmes.

1.4.3 Hypothesis Three: that the patients' experience of holism will correspond with the wellness approach offered by practitioners.

1.5 DEFINITIONS

1.5.1 Holism

Two kinds of holism can be distinguished. In a somewhat narrow sense, holistic medicine/health care implies that the human organism is a living system consisting of various components that are all inter-related and inter-dependent. (Capra 1988) In a broader sense, the holistic approach also recognizes that this living system forms an integral part of larger systems. This implies that an individual organism is in continual interaction with its physical, mental, spiritual and social environment. It is therefore constantly exposed to the influence of the environment but can also act upon it and modify it. (Capra 1988) Another definition is that the holistic viewpoint recognizes that the patient is not only ill, but also has very powerful healing processes at work; and it is at these processes that the practitioner directs his/her attention. (Sanford 1977) The holistic viewpoint makes no separation between the body and the mind or spirit, but recognizes them as one integrated system. (Brom 1990) In simple terms holism is an approach that includes the mind and the body. (Chopra 1989)

1.5.2. Wellness

The wellness concept describes a certain form of patient management. It implies that an individual's health exists in a continuous dynamic state along a biological spectrum, ranging between ideal functional wellness (perfect health) on the one hand, and death (severe illness) on the other. (Jamison 1991)

The practise of wellness is the practical application of a holistic approach to health care, where the practitioner, with the co-operation of the patient, can improve the state of wellness (health). This can occur irrespective of the patient's diagnosis, or even without a diagnosis. This can be achieved through modifications of the patient's life-style. Life-style can be assessed, and if needed, the practitioner can recommend a modification of the patient's physical, mental, spiritual, chemical and social spheres.

1.5.3 Primary Health Care

According to the World Health Organization (1984), it is partially defined as essential health care made accessible at a cost the country and community can afford, and with methods that are practical, scientifically sound and socially acceptable. It should include education of the community on prevalent health problems and on methods of preventing or controlling them. Primary health care emphasizes the prevention of disease and the promotion of health through community centered services and the maintenance of the integrity of the environment.

1.5.4 Religion

For the purpose of this study "Religion" will refer to any formal religion with definite outlines and set definitions, principles and practices.

1.5.5 Spirituality

This study will only offer a minimal definition of spirituality. It will be seen as vitality, or the way in which an individual is energized and engages with actions, thoughts and other people, outside a formal religion. It will be seen as a belief system other than that of a formal religion through which people acknowledge a spiritual realm contributing to their existence.

1.6 IMPORTANCE OF THE STUDY.

South Africa is still a developing country (World Health Organization 1993.) However, from the outset, South African health care development has followed the patterns set by developed countries, accentuating curative and hospital care. This model has become unacceptable, not only in South Africa, but also in developed countries, because it is unaffordable and it does not offer optimal health care to all the people of a country.

According to the World Health Organization (1989), developed countries spend two-to-three percent of their gross national product (GNP) on health. In South Africa the total health expenditure for the

financial year 1987/88 amounted to 5.40 percent of the GNP. This is clearly far in excess of the norm, as it exceeds the average figure quoted by 3.40 - 2.40 percent. Therefore, South Africa already spends too much of its GNP on health care.

Other points for concern are the rapid population increase, urbanization, the squatter problem and the ageing population. These will result in an escalating need of health care services in South Africa. However, being a developing country, there are numerous areas in need of financial assistance apart from health care services, e.g. housing and education. This in itself suggests that there is no possibility of a significant further increase in the resources allocated to health care.

An alternative model on which the present health care system of South Africa can be based should be considered. Not only one that is financially more viable, but also one that offers optimal health care to all the inhabitants of the country.

In the report of the subcommittee of Primary Health Care in South Africa (1992), the Department of National Health and Population Development has made it quite clear that a new health dispensation is needed for South Africa. Also that primary health care will be playing a major role in the restructuring of its health services.

The concept of holism and the practises of wellness are geared specifically towards a primary health care system. Incorporating this approach into any field of health care will therefore directly contribute to achieving a more effective system in this country.

The holistic and wellness approach is of such a nature that it can be incorporated successfully into any field of our current health care system without any further increase in health expenditure. Chiropractic is one field of health care that strongly advocates the use of a holistic and wellness orientated approach in patient management. It would therefore be extremely interesting and beneficial to note to what extent these concepts and practices are already incorporated into the current practice management methods of chiropractors in South Africa. It may also have significant implications for the educational programmes in chiropractic currently employed at the Natal and Witwatersrand Technikons.

CHAPTER TWO: REVIEW OF THE RELATED LITERATURE

2.1 INTRODUCTION

Capra (1988) points out that all systems, including Western medicine, are products of their history within certain environmental and cultural contexts. He states that, with time, cultures seem to have oscillated between reductionism and holism and often differed from the model that dominates our current scientific medicine. The attitude that medicine should be practised as a scientific discipline, i.e. based on the diagnosis and treatment of illness and disease, has transformed the nature of present day medicine to resemble the reductionistic model.

Current medicine closely approximates reductionism in that it is based on the assumption that the whole can be understood by an analysis of its parts. While this approach has certainly led to many advances in medicine, the glamour attached to these advances has tended to hide how little we really know regarding the nature of biological phenomena, and the processes of health and disease.

The philosophy of Rene Descartes greatly influenced the study and practice of medicine since the 17th century. According to Strang (1984) the Cartesian philosophy in part was, that everything was potentially measurable and that that was unmeasurable, was unreal. The Cartesian philosophy is reductionistic because it implies that you can examine a complex phenomenon and understand it by viewing the fundamental elements making up the whole, and then explain the whole phenomenon in terms of its parts. However the Cartesian philosophy does not acknowledge the possibility the whole can be any more than the

summation of its parts. (Strang 1984) It also assumes that the different elements making up the whole can be treated as isolable from each other. Therefore, with regards to the mind-body relationship, the Cartesian philosophy assumes that the mind has no affect on the body and the body in turn, has no affect on the mind.

The holistic approach stands in direct contrast to this reductionist model. Holism considers the contributions of the mind and the body in the manifestation of an individual's health. The philosophical writings of Hippocrates assisted in the development of a rational and scientific system of medicine. Furthermore, the terminology in contemporary writings on holistic medicine is virtually identical to Hippocrates' early writings. It includes concepts such as disease, homeostasis, and the integration of the mind, body and spirit in caring for the patient.

2.2 THE NEED FOR CHANGE IN THE APPROACH TO HEALTH CARE

During the seventeenth century, the focus of health care shifted from a holistic approach, initiated by Hippocrates, to a 'systems-approach'. The latter formed a background for the development of reductionism, as seen today in current medicine.

This reductionist medical model, with its emphasis on disease, has tended to distract us from the one simple fact; namely, that healing is a natural process that is occurring constantly. The purpose of all biological processes in the body is to maintain a healthy state within the system as a whole. (Brom 1990)

According to Chopra (1989), surveys taken in England and America have shown that as many as 80 percent of medical patients feel that their underlying complaint, (their reason for going to a doctor), was not satisfactorily resolved when they left the consulting room. Chopra (1989) mentioned studies, going back as far as the end of World War II, which showed that a large percentage of patients left the Yale medical school hospital sicker than the day they arrived. (These studies are paralleled by similar ones which showed that a large percentage of patients with psychiatric complaints improved more while they were on the waiting-list to see the practitioners than after they actually saw them. So the situation is not simply one of exchanging a "body doctor" for a "head doctor".)

Chopra (1989) stresses that our bodies possess the ability to heal themselves. This is not a mystical or random phenomenon, but is a natural process which has yet to be fully explained. He states that health can be most successfully achieved through treatment that recognizes the interdependent mind/body mechanism inherent within each individual. He also discusses how time-honoured assumptions in medicine have been proven wrong through new scientific research methods; and he elaborates on how wrong Western medicine can be if it insists that matter is superior to mind.

It is becoming obvious that a medical model based on reductionism is no longer adequate for the modern practice of medicine, and that a new model is urgently needed.

2.3 DEFINING TERMINOLOGY

Due to cultural differences in the approach to medicine and health care, cross-cultural studies may broaden our perspective and enable us to view our current cultural ideas regarding health and healing in a more

comprehensive context. Sanford (1977) reminds us that the word "health" is a derivative of the old Saxon word "hal" from which the word "whole" originates. In this sense, health equals wholeness. He continues to say that wholeness implies something organic, with various parts functioning together as a unit. This is very similar to two definitions Capra (1988) gives for holism. In a somewhat narrow sense, Capra maintains that holism in medicine means the human organism is seen as a living system whose components are all inter-connected and inter-dependent. In a broader sense, his holistic view recognizes also that this system is an integral part of larger systems. This latter view implies that the individual organism is in continual interaction with its physical and social environment. It is constantly affected by the environment, but can also act upon it and modify it.

Strang (1984) agrees with Hippocrates' holistic approach to health care. That is why Strang prefers the term 'state of the organism' instead of 'state of health' when discussing an individual's well-being. According to him, 'state of health' tends to imply simply the degree to which disease is absent. This correlates closely with the traditional, erroneous view of health being the absence of disease. Strang (1984), like Hippocrates, does not consider health to be a well-defined entity, but rather a dynamic interaction between various external and internal factors affecting an individual and his/her environment. Therefore Strang cannot accept the term 'state of health' which considers health (and disease) as an entity, as this would mean that health can freely enter and leave the human being, much like a visitor entering and leaving a hotel.

Capra (1988) sees health as a state of well-being. He defines health as a subjective experience whose qualities can be known intuitively but can never be exhaustively described or quantified. According to him the concepts of health, illness, disease and pathology do not refer to well-defined entities, but are integral parts of limited and approximate models that mirror a web of relationships among multiple aspects of the

complex and fluid phenomenon of life. It is therefore impossible to fully define and understand the concept of health as a part of life, because our understanding of life itself is limited.

Furthermore it is interesting to note that "balance" is viewed as the key concept of health in an Eastern model. There, illness is not thought of as an intruding agent, but rather as the result of a pattern of causes, leading to disharmony and imbalance. This model also recognizes that the nature of all things, including the human organism, is such that there is a natural tendency to return to a dynamic state of balance. Going in and out of balance is seen as a natural process that occurs constantly throughout the life cycle.

Winterstein (1993) mentions the fact that a group of chiropractors is aware of the importance of a thorough patient history and physical examination with special attention to the entire neuro-musculo-skeletal system, because of the 'continual system interplay' in the ongoing struggle for optimum health in an organism. This latter concept resembles that of Capra (1988), and Strang (1984), discussed earlier.

Jamison (1984) deals extensively with the concepts of holism and wellness in patient care. She outlines the idea of a spectrum, with health and disease at opposite ends. She views death as the extreme pole on the disease side of the spectrum, with optimal health on the opposite side. Disability is a less severe presentation on the disease side of the spectrum. She views average health as the absence of disease in a clinical assessment which employs physical examinations and special investigations to detect any deviation from the 'norm'.

This viewpoint is somewhat different to that of Capra (1988). He claims that this common representation of health and illness at opposite ends of a linear continuum is quite misleading. This is because health is

really a multi-dimensional phenomenon involving interdependent physical, psychological and social aspects. He identifies three interdependent levels of health: individual, social and ecological. What is unhealthy for the individual is generally also unhealthy for society, as well as the embedding ecosystem. According to Capra (1988), to be healthy means to be in harmony with oneself, physically and mentally, and also with the surrounding world.

2.4 THE AIM OF A HOLISTIC APPROACH TO HEALTH CARE.

Capra (1988) brings to light the idea that both health and ill-health are seen as natural phenomena. Perfect health cannot be the ultimate goal of either patient or practitioner. Instead, the aim of Chinese medicine, for example, is to achieve the best possible adaptation to the individual's total environment. The responsibility to maintain health and to play an active role in the restoration of health when the organism develops an imbalance, rests on the patient's shoulders. According to Capra (1988), conforming to the rules of society and taking care of one's body in the changing environment, with the assistance of a practitioner, will accomplish this requirement.

This viewpoint is shared by many authors, including Sanford (1977) and Strang (1984). Sanford (1977) stresses that without diligent efforts from the patient, no movement towards wholeness can take place, as the health of each individual is directly related to his/her, psychological and spiritual state, health habits and attitudes. Haldeman (1990), specifically interested in chiropractic philosophy, mentions that both the vitalistic and the scientific fundamental philosophical trends, shared by chiropractic leaders such as D.D Palmer, B.J. Palmer, Harper, Stephenson, Carver, Homewood, Janse, Illi, Gillet and others, are based

on the principle that healing is done by the patient. Dr. Reed Phillips makes the observation that the philosophy of chiropractic infers the integration of body, mind and spirit. (Haldeman 1992)

Coulter (1990) elaborates on the idea that a patient's health is directly related to personal attitudes. He states that self-responsibility is the foundation of a wellness life-style, and that without individual responsibility, wellness is not possible. Needless to say, if patients can assume responsibility for wellness they can also assume responsibility for illness. This is fundamental, as illness cannot be treated without the patient assuming some responsibility. However, Strang (1984) stresses that chiropractic perceives the individual as being in a state of continual flux along a biological continuum. This concept, together with those discussed in the above two paragraphs closely approximate the definition of wellness partially stated in section 1.5.2 viz: that Wellness is a term that describes a certain form of patient management. It implies that the practitioner applies the holistic concepts in health care to his patient management programme. This concept views the patient as a multi-dimensional organism which continuously exists in a dynamic state of balance of well-being. The practitioner must therefore strive to achieve the preservation of each patient's individual autonomy, as well as his/her ability to integrate harmoniously into larger systems.

According to Haldeman (1990), chiropractic philosophy has been the major factor which has distinguished chiropractic from other professions. According to him, chiropractic philosophy places great emphasis on listening to the patient, expressing a caring attitude, demanding a greater interest in the welfare of people instead of personal or financial gain, and an emphasis on natural healing. This viewpoint relates closely to the definitions of holism and wellness discussed in this study.

Winterstein (1993), points out that there is a group of chiropractic practitioners who appreciate the inherent, self-regulatory and healing powers of the body. According to him, this group recognizes the importance of treating a patient as a whole (whether or not a disease process is present). In light of this, we need to determine whether or not chiropractic is being practised in accordance with holistic and wellness principles. We must also consider whether or not our educational programmes are structured to include these principles in the education of future chiropractors.

2.5 THE RELATIONSHIP BETWEEN SOCIETY AND HEALTH

Capra (1988) states that in our society, a truly holistic approach will also recognize the environment created by our social and economic systems. These latter two are based on a fragmented and reductionist Cartesian world-view which has become a major threat to our health. Thus, an ecological approach to health that focuses on all possible health problems in our surrounding environment, will only make sense if it leads to profound changes in our technology and our social and economic structures.

W and D Schwartz (1987) also acknowledge the relationship between health and society. They state that health and society must be seen holistically and that there can be no health of individuals unless their society, and their relationship with it, is healthy. These authors underline the need for a holistic approach to health care in which modern hygiene and traditional forms of social caring are combined.

Both these viewpoints can lead to some degree of confusion. They imply that personal effort to obtain perfect health is futile unless similar efforts are occurring in society. Jamison (1984) asserts that health care demands an awareness of psychological and sociological well-being in order to attain a more positive

approach to health care. Not only must the practitioner consider factors that will contribute to the promotion of the individual's health, but must also consider the well-being of the patient's psycho-socio-economic environment. The latter refers to the contribution of each individual's psychological state, as well as the social and economical environment of the community in which the individuals find themselves. She stresses the fact that in defining health and disease the socio-cultural environment must never be ignored or underestimated.

In contrast to the above views by Schwartz (1987) and Capra (1988), this view of Jamison (1984) recognizes the contribution the individual can make in obtaining optimal health through personal effort.

Haldeman (1990) points out that the maxim which says chiropractors must love, respect and be concerned with the overall health and welfare of their patients, has often been expanded to a very real involvement by chiropractors in the advancement and betterment of their communities. According to Haldeman (1990), chiropractic philosophy has, over the years, ensured a communion between chiropractors, their patients, and their communities.

According to Kleynhans (1991) the health care needs of society are changing from reductionistic-based health care to a holistic type health care that focusses on community-based prevention-orientated primary health care. Kleynhans (1991) continuous to say that the next generation of chiropractors must be prepared to assume their rightful position in society in this context.

2.6 THE RELATIONSHIP BETWEEN STRESS AND HEALTH

According to Capra (1988), temporary stress is an essential aspect of life, and is due to a transient loss of flexibility in the individual. Chronic stress can however be harmful, and does play a significant role in the development of many illnesses. The prolongation of stress often results from our failure to integrate the responses of our bodies with our cultural habits and social rules of behaviour. Prolonged stress (overload stress) can lead to the possible suppression of a body's immune system, (i.e, its natural defense mechanism against infections and other diseases.) This is a possible key element in the link between stress and illness which has not yet been fully explored by medical science. (Capra 1988)

Another definition of stress offered by Brom (1990) is that stress can be viewed as energy raised to such a frequency that it has a negative resonance effect on certain body organs. This will lead to disease of the affected organ.

Sources of overload stress are manifold. They may originate from within the individual, the physical environment, or be generated collectively by the society and culture. Stressful situations arise not only from personal emotional traumas, anxieties and frustrations, but also from the hazardous environment created by our socio-economic system. Examples of the latter include noise and air pollution, traffic congestion and financial commitments. If a truly holistic approach to health care is to recognize the contribution of the social and economical environment on our health, it must also recognize stresses that stem from conflicts within these environments. (Schwartz 1987)

In order to have a holistic approach to health, stress factors acting on the individual will have to be investigated and modified in a co-operative effort between patient and practitioner.

2.7 PATIENT MANAGEMENT

W and D Schwartz (1987) point out that the holistic practitioner offers an alternative route to health. Crucial to the successful restoration of health is the practitioner's recognition of a need for balance between physical body, mind, emotions and vitality (or spirit). The factor that is causing this imbalance must be identified, as well as the factors that aggravate and perpetuate it.

Capra (1988) states the need for integration of physical and psychological therapies, and that such an integration will amount to a major revolution in health care, since it will require full recognition of the interdependence of mind and body, in health and in illness. He briefly discusses the recent discovery of a bio-feedback phenomenon, which showed that a wide range of physical processes can be influenced by a person's mental efforts. This strongly supports the need for implementing the possibility of psychosomatic self-healing in health care. The first step in this kind of self-healing will be the patient's recognition that he/she has contributed consciously or unconsciously to the origin and development of the illness, and hence will also be able to contribute to the healing process.

This correlates well with the philosophy of chiropractic, as outlined by Strang (1984) that the chiropractor must make patients aware of the active role they play in the development and treatment of their condition. Coulter (1990) notes that chiropractic explanations also appeal to holistic or spiritual world-views and also deal with related influences on health. They stress 'drugless' treatment and a positive, dynamic view of the healthy state. For example, the idea that the spinal lesion, along with poor nutrition and stress all lead to lowered resistance and disharmony, is a satisfying one. The net effect of chiropractic philosophy is a logical set of beliefs which appeal to common sense, and to the use of scientific terminology, yet promote a natural, non-invasive, holistic approach to healing.

According to Coulter (1990), the final component of chiropractic patient management is a plan that requires commitment and co-operation. It may include programmes of exercise, nutritional counselling, stress-management techniques and behavioural change by means of which the chiropractor strives to develop for the patients a positive image of personal control over their health.

Winterstein (1993) mentions a group of practitioners for whom being a chiropractor is more than one who just adjusts or manipulates the spine. He points out that these practitioners view a chiropractor as consummate physician - "a healer who is even a scholar".

2.8 SUGGESTIONS TOWARD THE DEVELOPMENT OF A NEW HEALTH CARE APPROACH

D and W Schwartz (1987) suggest this more holistic approach to health care via an increased self-awareness and expression of health through personal involvement, along with education on diet, life-style, and personal social, economical, and environmental changes.

Capra (1988) outlines a basic framework for the new holistic approach to health care that includes:

1. A comprehensive, effective and well-integrated system of preventative care followed by maintenance that is closely interrelated with individual and environmental responsibility.
2. Health education and assistance by health professionals dedicated to the maintenance and improvement of health.

3. Positive changes in the business community, educational systems, social structures, media and government that may contribute to improved health of the individual and the community.

In terms of the above, the basic aim of any practitioner will be to restore the patient's homeostasis with as little intrusion from the practitioner as possible. The treatments will be kept as conservative and free of side-effects as possible, and acknowledge the body's innate tendency to heal itself.

Chiropractic philosophy incorporates precisely this aim by defining the role of chiropractor as one of assisting the body's natural healing forces to establish homeostasis within the individual; and with as little as possible intervention from the chiropractor. According to Haldeman (1990), scientific research is essential for a rational philosophy, and it is the philosophy that will define the future of chiropractic research. A moral and ethical approach, based on caring, will ensure that chiropractors maintain the good-will of their patients as well as their demand for chiropractic care. Furthermore, Haldeman (1990) states that chiropractic philosophy must commit itself to the health of the community and the world as a whole, and it must act as a guide to all political activity in national and international chiropractic associations. Thus it will ensure a position for chiropractic in the general health-care delivery system.

Jamison (1984) outlines three patient care models that can be followed by a practitioner:

1. The Relational/Rehabilitational model that closely approximates the holistic and wellness concepts.
2. The Classical/Clinical model that concentrates on the knowledge and the skills required by the practitioner.

3. The Adversarial/Management model in which the social control aspects of patient care are underlined.

She suggests that the second model is the most appropriate in a primary contact practice. She mentions that 'person-orientation' care implies total care of the patient. This entails identification of all etiological factors, the natural history of the patient's condition and all available means of intervention.

Furthermore, Jamison (1984) is a very strong advocate of caring for patients in their total environment. This implies providing holistic health care to the patient within the community. Patients seeking care from a primary contact practitioner are thus entitled to:

1. Physical assessment in order to ensure early diagnosis and exclusion of organic disease.
2. Psycho-social stress assessment, which identifies various stressors in the individual's environment, and analysis of his/her ability to cope with them.
3. Socio-economic environmental assessment in order to identify the individual's family structure, as well as occupational opportunities.
4. Nutritional assessment with the aim of improving the patient's dietary habits and health status.
5. Health assessment to assess health hazards, attain knowledge to assist prevention of disease, and information about basic health promotion.

In referring to the early diagnosis and exclusion of any organic disease, as noted in the first entitlement, it is presumed that Jamison means that the patient will then be referred to another practitioner, possibly in order to provide the patient with tertiary health care.

This view of holistic medicine is somewhat different to those of Strang, Capra and Haldeman. Jamison feels that the objective of a holistic approach to health care is to utilize all the available resources to maximize an optimal outcome for the patient. Health care that fails to take cognizance of available support systems within the community, or fails to recognize dysfunctional coping skills, is as limited as patient care which overlooks biological dysfunction.

This presumably implies that in order to receive optimal health care in all areas of need (holistic health care), an individual may have to receive treatment from various different health practitioners; and that in some cases a practitioner cannot successfully administer adequate health care without making use of other available resources in the health field.

This view closely resembles that of Winterstein (1993) who identifies the presence of at least three forms of healing concepts throughout recorded history. He mentions a form of healing achieved by calling upon the attention of a supreme being. Another form is healing from within the organism, through so-called natural methods, and lastly a form of healing that by attacks the illness with various forms of medicaments or surgical procedures. Winterstein (1993) continues to say that at various times, these three general forms have intermingled, but there were times when one of them has reigned prominent in society. According to him, the ideal would be for these three models of health care to be integrated into one system which would benefit a wider variety of people within their own cultural context.

Kleynhans (1991) states that the changing attitudes of society towards a greater need for prevention-orientated health care suggests a strong argument for inclusion of holism in the chiropractic curriculum.

Concerning the future of health care, Capra (1988) is of the opinion that in order to be part of the new holistic approach to health care, medical students and other health care professionals will require a considerable broadening of their scientific basis, with much greater emphasis on the behavioural sciences and human ecology. Furthermore, there will need to be a re-orientation of research priorities, from an over-emphasis on cellular and molecular biology to a more balanced approach.

This closely resembles the viewpoint of Winterstein (1993), who states that in spite of the renewed interest in alternative healing methods ("natural-methods"), that bodes well for chiropractic, it would be a mistake for chiropractic to overlook the need for scientific validation of chiropractic concepts and practices. Winterstein is of the opinion that the chiropractic profession needs to renew its commitment to the development of its philosophy, art and science.

Capra (1988) continues by stating that a number of therapeutic models and techniques already exist that go beyond and enhance this biomedical framework, and are consistent with the 'systems' view of health care. He mentions chiropractic, homeopathy and clinical ecology which includes nutritional counselling and bio-feedback. Accordingly it would be the role of the general practitioner or the health team to find out which model or approach is most suitable for each particular patient. At the same time Capra sees researchers and clinicians exploring these models further, eventually integrating them into a coherent and comprehensive health care system.

There seems to be a paradox in the above-mentioned statement, in that Capra identifies and compares these new models and techniques with the 'systems view' of health care. However, in terms of this dissertation the 'systems view' is associated with the reductionistic approach to health care. In view of the general contents of Capra's statement it is therefore presumed that he makes this comparison with a holistic meaning attached to the term 'systems view'.

Davies (1983) acknowledges the changing trend in medical circles where, according to him, greater emphasis is being placed on 'the whole patient'. He adds that holistic science is rapidly developing into something of a cult, partly as a result of its close association with oriental philosophy and mysticism which promote the concepts of 'oneness' of the spirit and universal destiny. He discusses the danger of viewing an organism in terms of individual atoms only, as this corresponds to the reductionistic viewpoint of life and matter. He stresses that it is important to consider the human being as a collection of individual cells and atoms, and acknowledges that it is their organization into a complex whole that gives them properties of life. These properties of life are sometimes referred to as 'life-force' or 'innate-force'. In accepting this holistic perspective of Davies, the need for a 'life-force' is removed and the question immediately arises whether science, in particular physics, can ever hope to provide an explanation for the holistic phenomena, including life and, by implication, health.

Davies (1983) continues to discuss various attempts made by physicists to develop a wide-ranging holistic physics, two of which are thermodynamics and quantum physics. This new holistic viewpoint, taken by physicists, is finding sympathy with sociologists and psychologists, especially those who advocate a holistic approach to their subjects. According to Davies (1983), fundamental physics is pointing the way to a new appreciation of humanity and its place in the universe.

2.9 SUMMARY

In reviewing some of the available literature relevant to holism and wellness in health care, an attempt has been made to identify common key factors related to the concepts and practices of holistic and wellness models in health care.

A brief historical background to the development of the holistic and wellness models, as they pertain to health care, and their incorporation into past and present health care was given. It became apparent that a shift in consciousness towards a more holistic approach to health, science, and life in general, is taking place. Health, holism and wellness, as defined by various authors, revealed great similarity in their perceptions of these concepts.

Some of the key factors identified in the various sources were briefly mentioned and compared. These indicated a great need for the development of a more holistic approach to health care, as well as the influence of culture and society on health, and the need for greater awareness of the interrelation between these factors and an individual's health. This concept of interrelatedness between various aspects of life and health was then discussed further, with special reference to those factors identified in the literature that play a cardinal role in the development of a holistic approach to health care. Factors identified as having some relation to health included: life-style, nutrition, stress, family and personal relationships, as well as the psycho-socio-economic environment of the individual.

The review of related literature was concluded by pointing out some common acknowledgements regarding the ineffectiveness of the current health care system and the need for a new holistically orientated approach. Various suggestions towards obtaining a new holistic approach to health care were

discussed. It became obvious that alternative paradigms closely approximating this goal already exist in chiropractic philosophy.

CHAPTER THREE: MATERIALS AND METHODS

3.1 THE DATA

This study will consist of primary and secondary data. The nature of these two types of data are as follows:

3.1.1 Primary Data

- a) The response of patients concerning their perceptions and experiences of holism and the practice of wellness in chiropractic health care.
- b) The response of practitioners concerning their perceptions and experiences of holism and the practice of wellness in chiropractic health care.

3.1.2 Secondary Data

The review of literature relevant to the concepts of holism and the practise of wellness in health care, and especially in chiropractic health care, will be used.

3.2 RESEARCH METHODOLOGY

Two different questionnaires was used. One was specifically compiled for the use of chiropractic practitioners, practising in the Republic of South Africa, and the other was for the use of chiropractic patients. (See Appendices 7.1 and 7.2.) Both questionnaires were pre-tested prior to use in this study. Each practitioner will receive a cover letter of introduction, (See Appendix 7.3), and one questionnaire that was to be completed by him/her, as well as ten patient questionnaires. The latter was assigned in a Systematic Random fashion. In order to have selected the sample size of ten patients, it was necessary for the receptionist to follow a set of specific instructions as illustrated in Appendix 7.6. Practitioners was requested to return their completed questionnaires and to ensure that the patients returned theirs. For this purpose, eleven return-address envelopes was provided for each practitioner. The receptionist was also required to complete and return the attached log on which she was required to indicate the number of patient "compliers" and "non-compliers". (See Appendix 7.7.)

Both patients and practitioners were also required to complete and return the **Informed Consent Document** which outlined exactly what would be required from them, and also stated their willingness to participate in the study. (See Appendices 7.4 and 7.5)

All responses to the questionnaires were computed by means of Frequency Tabulation and Cross-Tabulation, and compiled into Frequency Tables and/or Bar Charts. These were used to compare responses amongst patients, amongst practitioners and between these two groups. They were also used to identify certain key factors in the perceptions and experiences of holism and the practise of wellness in chiropractic health care by both patients and practitioners.

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CHAPTER FOUR: RESULTS OF PATIENT AND PRACTITIONER QUESTIONNAIRES

4.1 INTRODUCTION

In reviewing the available literature related to holism and wellness in health care, it became clear that a holistic approach to health care does not focus solely on the patient's well-being. In order to assess the concept of holism and its practice, chiropractic health care was defined in terms of specific components, namely: exercise, diet, stress, religion, emotions, smoking, occupational hazards, alcohol consumption, medication and drug use. Components not included in this survey, although they are deemed of importance in a holistic approach, were: a) the socio-economic and cultural environment of the individual and b) family and personal relationships. Components like these are difficult to assess by means of a questionnaire only, and could be dealt with in a separate study or survey.

It must be noted that only 218 patients (17.72 percent) replied out of an ideal response of 1250. This would have accounted for ten patients from each of 125 South African practitioners asked to participate. However, only 32 practitioners (25.60 percent) returned completed questionnaires. Both the patient and practitioner response figures are a poor representation of the total population in each group. Only 13 practitioners (10.40 percent) returned their completed log forms. According to these forms only two patients did not wish to participate in the study. However, due to the poor return of completed log forms it was not possible to give statistically representative figures regarding the percentages of complying or non-complying patients.

Factors that may have contributed to the poor participation, as well as suggestions for improvement in future studies of this nature, will be dealt with in the final chapter.

The results from each questionnaire were computed on a spreadsheet using QUATRO PRO and then analyzed, using the SG PLUS programme. The analysis consisted of frequency tabulation, a descriptive method and cross-tabulation.

4.2 RESULTS OF PATIENT QUESTIONNAIRES

The final conclusions, and suggestions relevant to the results of this study, will be discussed in detail in the final chapter. The following tables and charts will indicate the percentage totals of respondents and are followed by the results of specific cross-tabulation exercises.

4.2.1 Exercise

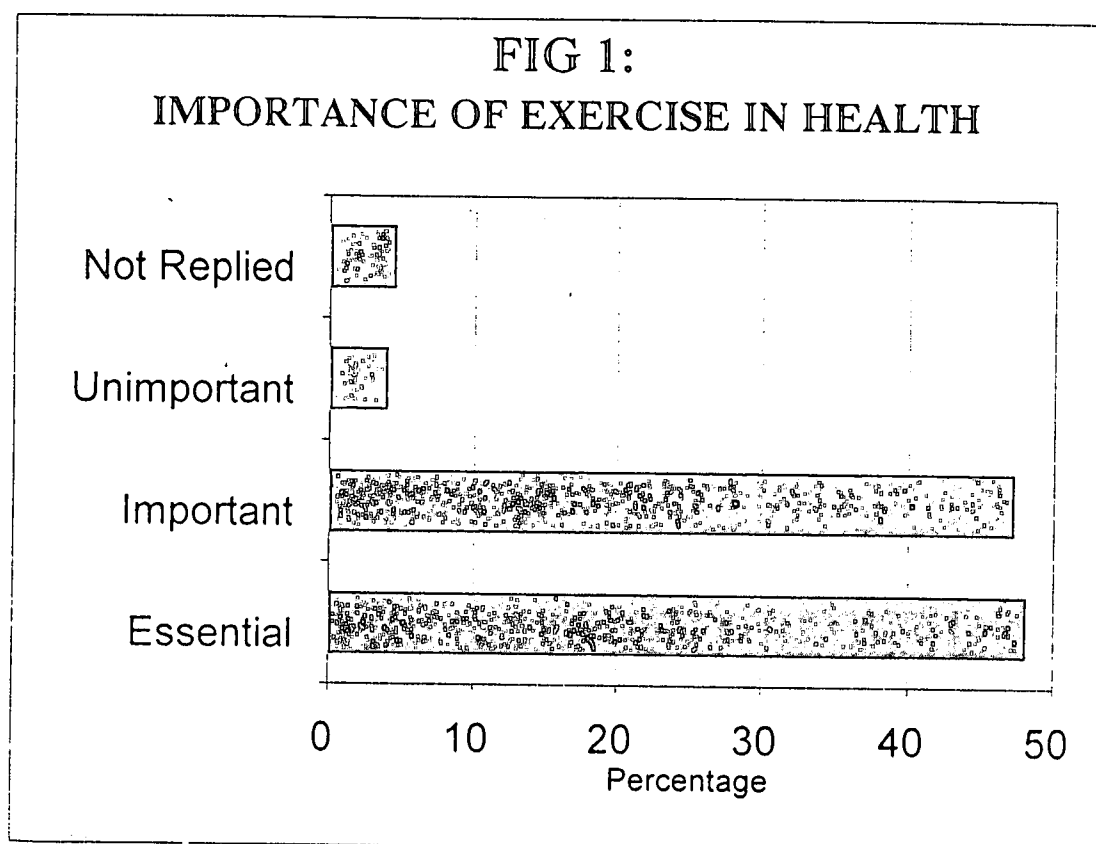
TABLE ONE : FREQUENCY OF EXERCISE

Daily	5 6 times per week	2 - 4 times per week	Never
11.00%	14.20%	50.00%	24.80%

TABLE TWO : DURATION OF EXERCISE SESSIONS

1 - 15 min	15 - 30 min	30 - 60 min	More than 60 min	Never
13.36%	21.66%	31.80%	12.90%	20.23%

FIG 1:
IMPORTANCE OF EXERCISE IN HEALTH

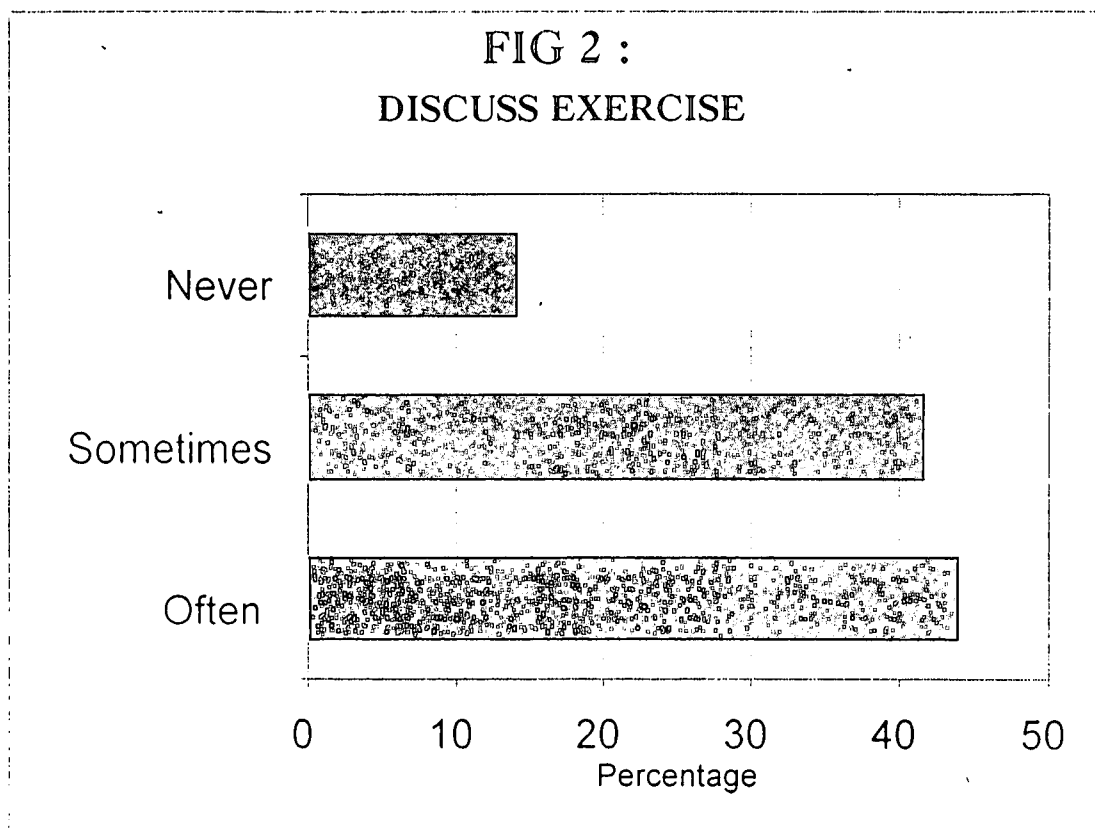


It is interesting to note that the majority of patients indicated that they participate in exercise and also rated exercise as either important or essential to their good health.

Cross-tabulation between Tables One and Two revealed that the majority of patients participated in an exercise or sporting activity between two and four times per week, for 15-30 minutes per session. It also seems that people who participate in physical activity less frequently, spend longer times doing this activity. The majority of people who participate in daily activity, do so for shorter durations of up to 15 minutes per session.

Cross-tabulation between Table One and Figure 1 revealed that of the 48.20 percent of patients who deemed exercise to be essential, 51.40 percent participated in a sporting activity between two and four times per week. Of the 47.20 percent who deemed exercise to be important in good health 50.50 percent participated in a sporting activity between two and four times per week. It could therefore be assumed that these patients participated in exercise because they feel it will have a positive effect on their health status.

However, of the 4.58 percent of patients who felt that exercise plays an unimportant role in good health, 33.3 percent participated in a sporting activity between two and four times per week. It could therefore be assumed that these patients participated in their physical activity for the sole purpose of enjoyment.



Patient results were compiled into Figure 2 in order to demonstrate the frequency with which practitioners discussed exercise with their patients. According to patients, the majority of practitioners discussed exercise with them. It could therefore be assumed that practitioners also perceived exercise as an important contributing factor to good health and they would therefore discuss it with the majority of their patients.

However, the results from Figure 1 showed that only 4.58 percent of patients rated exercise as unimportant in their personal health, but Figure 2 showed that a larger percentage of patients'

practitioners (14.20 percent) never discussed exercise with them. Therefore, it could be assumed that 9.62 percent (14.20 less 4.58 percent) of patients would be interested to hear about the role of exercise in their health.

TABLE THREE: SERIOUSLY CONSIDER ADVICE FROM PRACTITIONER

Yes	No
97.25 %	1.83 %

Obviously patients were quite prepared to consider advice given to them by their practitioners. Figure 2 revealed that practitioners discussed exercise with 85.70 percent of patients, and Table Three revealed that 98.17 percent of patients would consider advice regarding exercise. It would seem that there were some patients (12.47 percent) whose practitioners did not discuss exercise with them, who would be willing to consider such advice, should it be forthcoming.

4.2.2 Stress Management

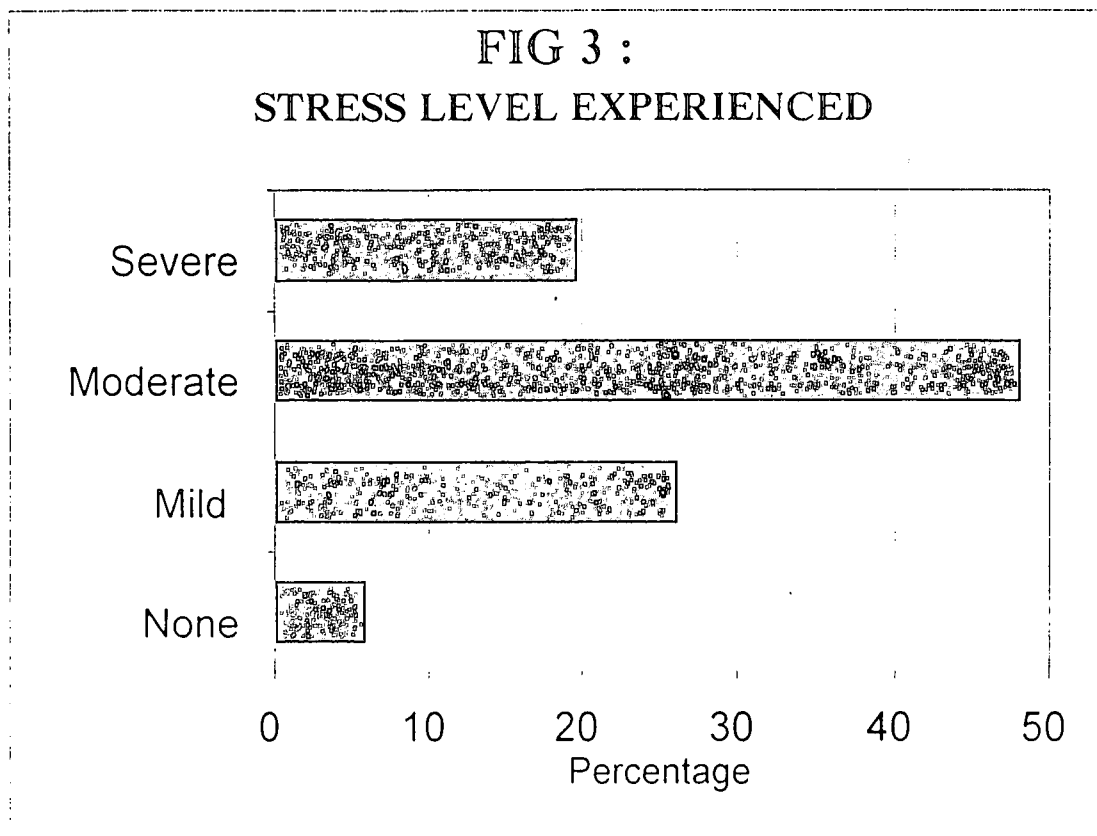


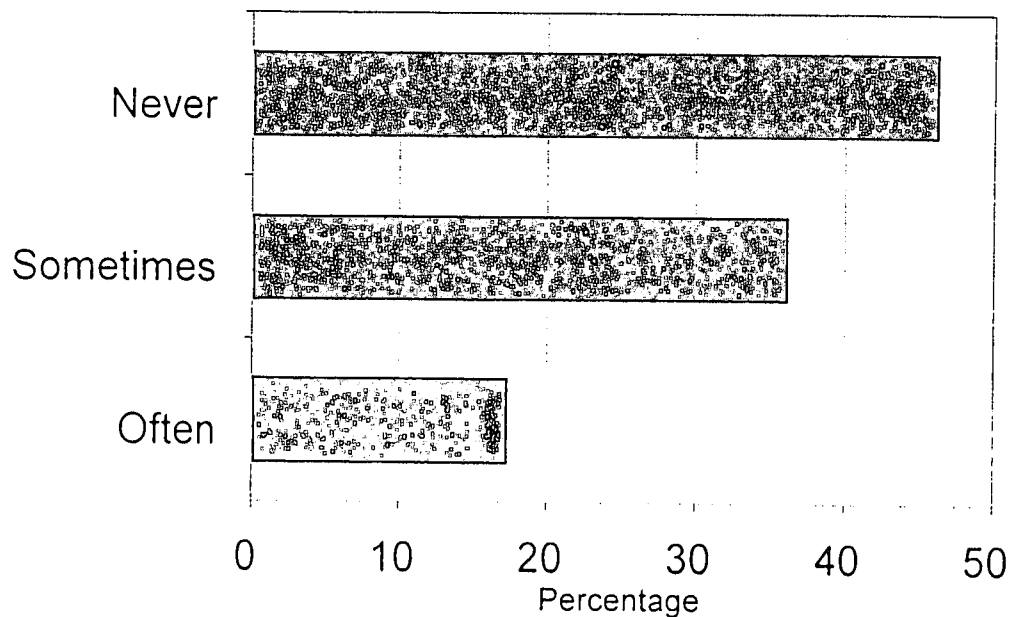
Figure 3 showed that very few patients (5.69 percent) actually perceived themselves to be stress-free. It is my opinion that stress definitely does affect the physical, emotional, chemical, and possibly, the spiritual well-being of patients. For this reason it is essential for patients to be aware of what stresses they are exposed to, in order to eliminate as much of it as possible. It is the duty of practitioners to make patients aware of the detrimental effect that stress can have on their well-being.

In Question Five patients were asked whether or not they believed stress could influence their health, and 86.70 percent of them felt that it could. Only 6.42 percent felt that stress had no influence on their own health and 6.88 percent were indecisive. It was encouraging to note that the majority of patients were indeed aware of the fact that stress does influence their health and well-being. This should make practitioners' tasks so much easier. There were some patients who were not sure whether or not stress influenced their health (6.88 percent). It is the responsibility of practitioners to help these patients to decide whether or not they believe that their stress influences their own health.

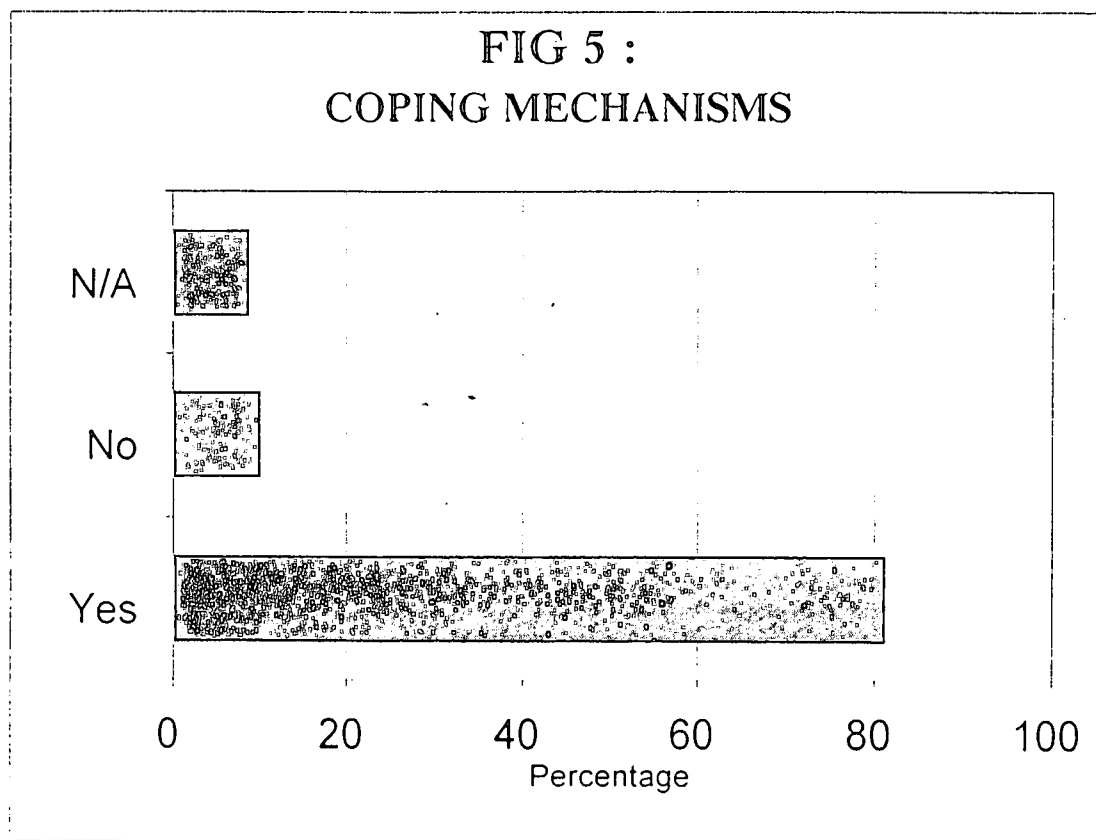
Cross-tabulation of Question Four and Figure 3 revealed that of the 6.42 percent of patients who felt that stress had no influence on their health, 28.60 percent perceived themselves to have no stress. However, 50 percent of them perceived themselves to have mild stress, and 21.40 percent perceived themselves to have moderate stress. These are the patients whom practitioners should educate regarding the effect of stress on their health, so that they may choose whether or not they want to modify or eliminate those perceived stresses.

Of the 86.70 percent who felt that stress does have an influence on their health, 22.80 percent believed they had severe stress in their lives. A further 51.30 percent perceived themselves to have moderate stress and 21.70 percent reported mild stress. Only 4.20 percent of this group perceived themselves to have no stress in their lives. In the first three groups, practitioners need to establish whether or not patients have some means of dealing with their stress. This necessarily implies that practitioners have to discuss stress with their patients.

FIG 4 :
DISCUSS STRESS MANAGEMENT



It was of concern to note that 46.30 percent of patients responded that their practitioners never discussed stress management with them, especially in light of the fact that only 5.96 percent of patients felt that they had no stress in their lives. (See Figure 3) It may be that practitioners did not discuss stress management with these patients because they knew that these patients had adequate coping mechanisms which enabled them to deal with their stress successfully. However, for practitioners to establish the range of adequate coping mechanisms, they would still need to discuss stress with all their patients. One cannot help but wonder whether practitioners are aware of the importance of adequate stress management skills and whether they have had adequate training in advising on such stress management techniques.



In Figure 5 the 8.72 percent of patients who found this question did not apply to them corresponds closely to the 5.96 percent of patients who said that they have no stress in their lives. (See Figure 3) It could therefore be assumed that patients with no stress in their lives felt that coping mechanisms would only be essential if they experienced stress.

It was interesting to note that of the 10.09 percent who said that they did not have ways of coping with their stress, 36.40 percent perceived themselves to be subjected to severe stress in their daily lives, and 50

percent perceived themselves to be subjected to moderate stress. None of these patients felt that they had no stress. This could indicate that there is a definite need for stress management in the field of health care.

Cross-tabulation of Figure 3 and Figure 4 indicated the need for practitioners to discuss stress management with more of their patients, especially those who felt they were subjected to mild or moderate stress. (See Figure 6)

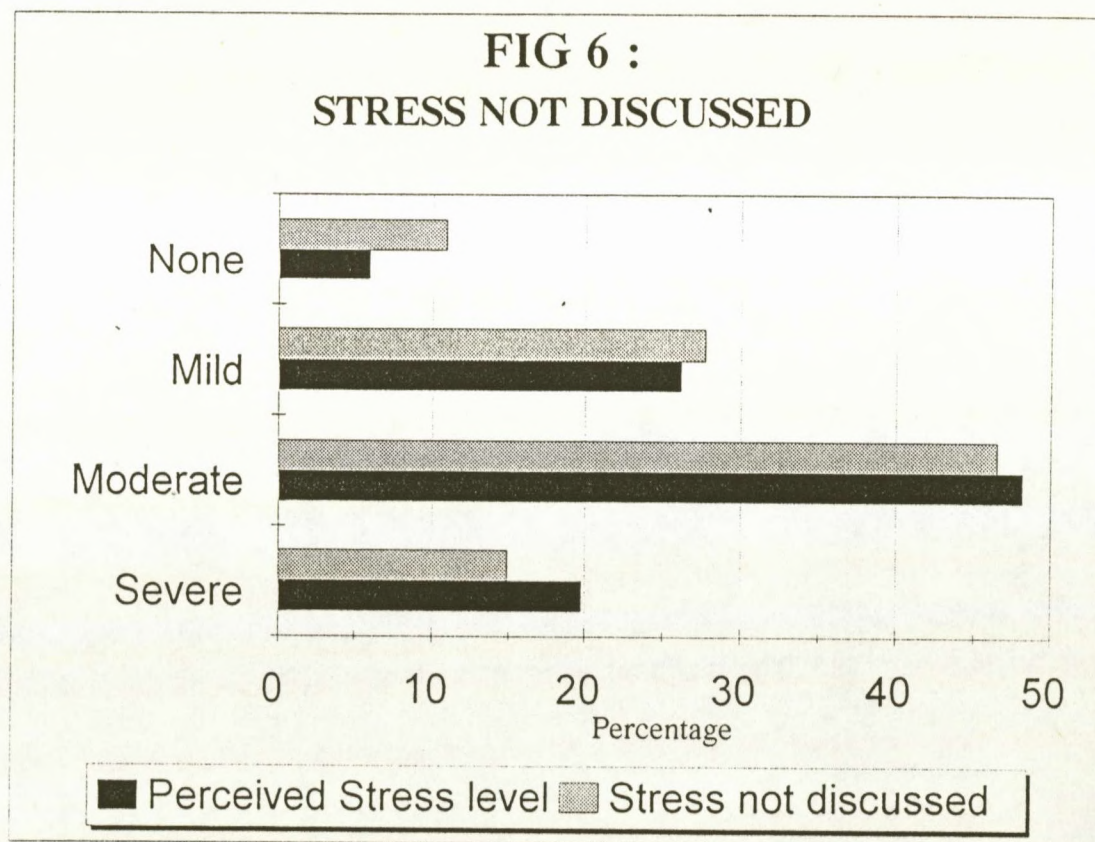
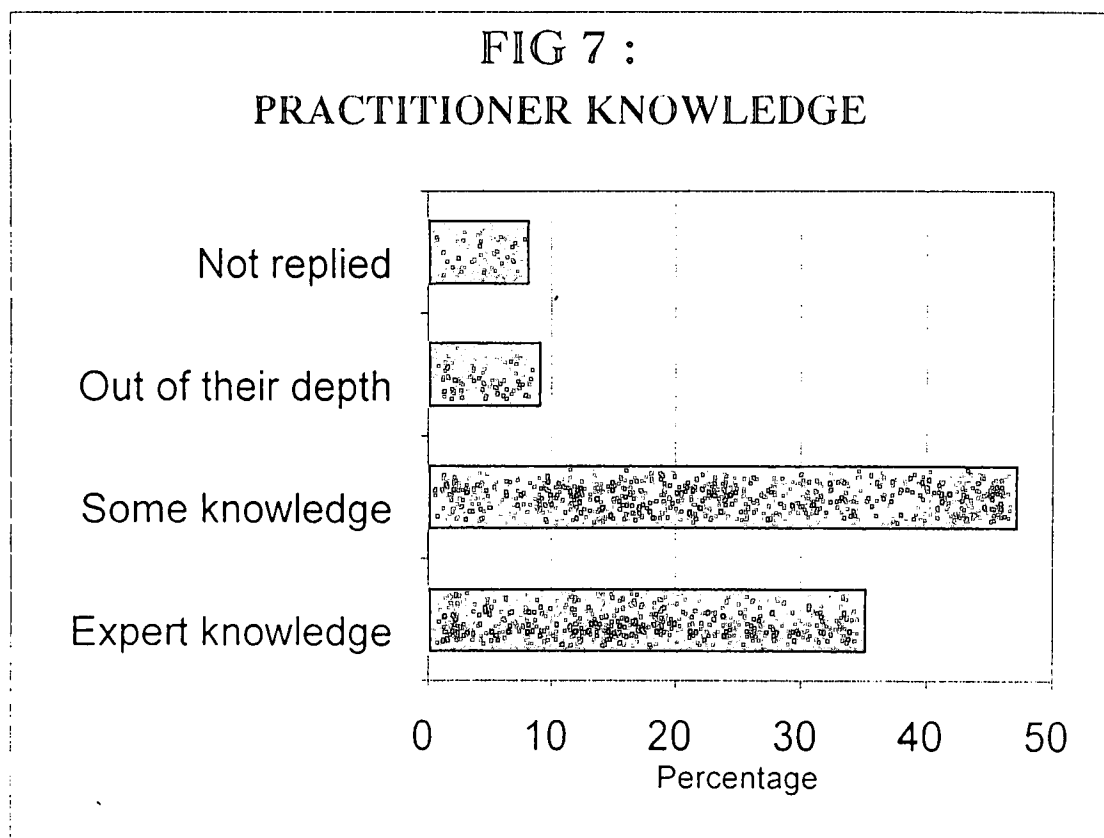


Figure 7 revealed that 47.25 percent of patients felt that practitioners had some knowledge in the field of stress management, and 35.32 percent felt they had expert knowledge. A later question revealed that 93.12 percent of the patients indicated that they would give any advice on stress management serious consideration.



An attempt was made in Question 12 to establish the ways in which patients most often relaxed. Relaxation is an important part of stress management and it is necessary to note associations between the severity of stress in the patients' life, and the type of relaxation preferred.

Table Four lists various manners of relaxation, as well as the frequency with which patients used them:

TABLE FOUR : FREQUENCY OF VARIOUS RELAXATION METHODS

Manner of Relaxation	Often	Sometimes	Never
Sleeping	38.10%	42.70%	19.30%
Sleeping Tablets	1.83%	9.67%	88.53%
Tranquillizers	1.83%	10.55%	87.61%
Exercise	31.20%	43.10%	25.70%
Hobbies	31.20%	47.70%	21.10%
Reading	46.79%	45.41%	7.81%
Watching Television	33.94%	58.26%	7.80%
Socializing	18.30%	67.90%	13.80%
Meditation	11.50%	27.10%	61.50%
Prayer	33.50%	32.60%	33.90%
Vacations	10.60%	76.60%	12.80%
Alcohol Intake	5.05%	41.74%	53.21%
Smoking	10.55%	7.34%	82.10%

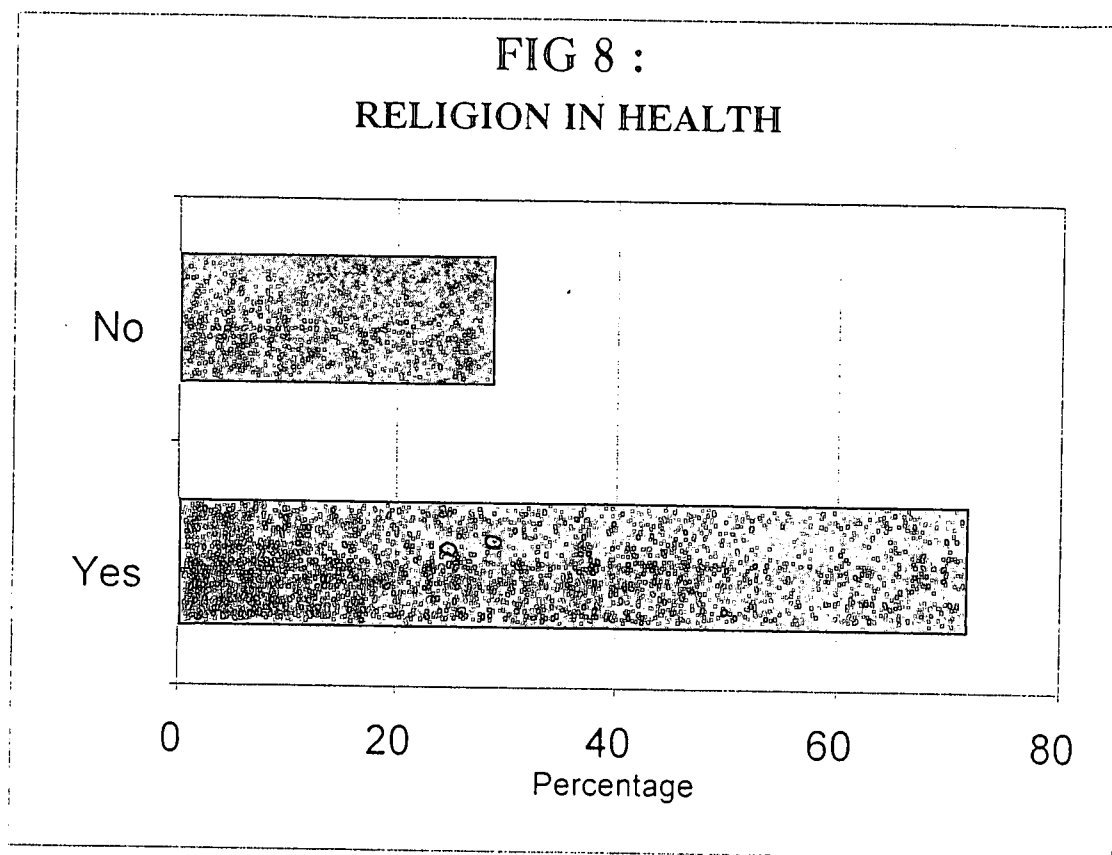
Patients were also given the opportunity of indicating other ways in which they relaxed. Some of the techniques listed could have been included in one of the categories listed above, but for the sake of brevity and clarity, the various separate responses were: bridge, gardening, sailing, caravanning, crosswords, massage, music, painting, puzzles, reflexology, sex, sport and walking.

Cross-tabulation made it clear that very few patients relaxed by means of medication i.e. sleeping tablets or tranquillizers (11.47 percent and 12.39 percent respectively). Smoking also seemed to be an option that most patients avoided. Only 17.90 percent used smoking as a form of relaxation. The majority of patients indicated that they relax by means of watching television (92.2 percent), reading (92.2 percent), vacations (87.2 percent), socializing (86.2 percent) and sleeping (80.7 percent).

The rest of the relaxation categories are fairly evenly distributed.

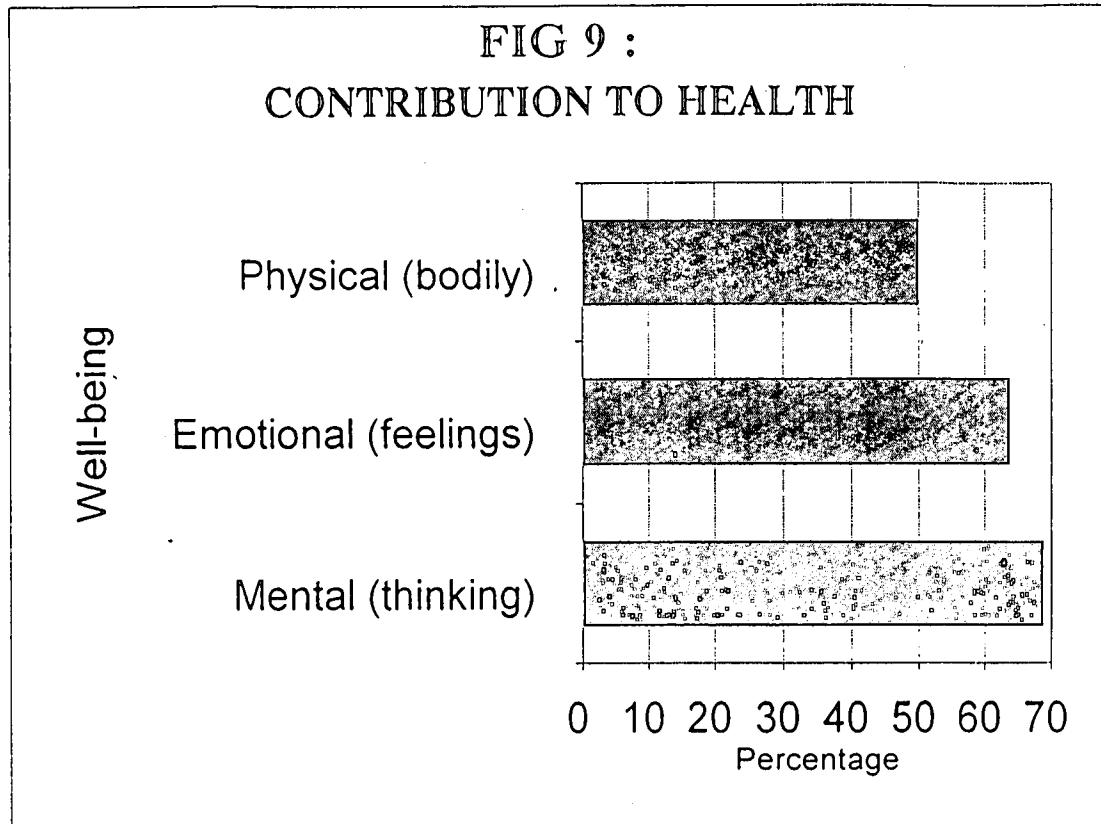
4.2.3 Religion

The review of related literature revealed that the various authors indicated a need for balance between the mind, body and spirit. They acknowledged the interdependence between these factors and health. However, none of the authors consulted in this review, made specific mention of the need to discuss religion or spiritual life with patients. For this reason the patient questionnaire was not aimed at establishing the degree to which practitioners incorporated aspects of religion and spirituality in their patient management programmes. The questionnaire was, however, aimed at establishing how important patients perceived religion or spirituality to be in their personal health.



The above results indicated that the majority of patients (71.70 percent) felt that religion had a contribution to make towards their health. For the purpose of this study patients were asked to indicate the way in which they felt religion achieved this and they had three options to choose from. Patients were not limited to only one choice but were allowed to select any one or more of the three options listed. This would explain why the total responses in Figure 9 exceeds 100.00 percent.

FIG 9 :
CONTRIBUTION TO HEALTH



These results revealed that patients felt that religion provided a sense of well-being in all three of these areas in almost the same degree. It is not surprising to note that slightly more patients associated religion with mental (thinking) well-being, probably as a result of religion often being intellectualized.

Cross-tabulation of Figure 8 and Figure 9 revealed that the majority of patients who felt that religion did not aid in achieving mental, emotional or physical well-being, also felt that religion had no contribution to make towards their own health in general.

The percentages in Table Four revealed that prayer constituted a form of relaxation for 66.10 percent of patients. This is consistent with the results of Figure 8 that revealed that the majority of patients (71.70 percent) felt that religion did have a role to play in their good health. It could therefore be assumed that the majority of patients who considered religion to play a role in their good health considered prayer to be a part of their religion.

The patients were asked to indicate how important they thought it was for their practitioners to discuss spiritual, physical, emotional and mental well-being with them.

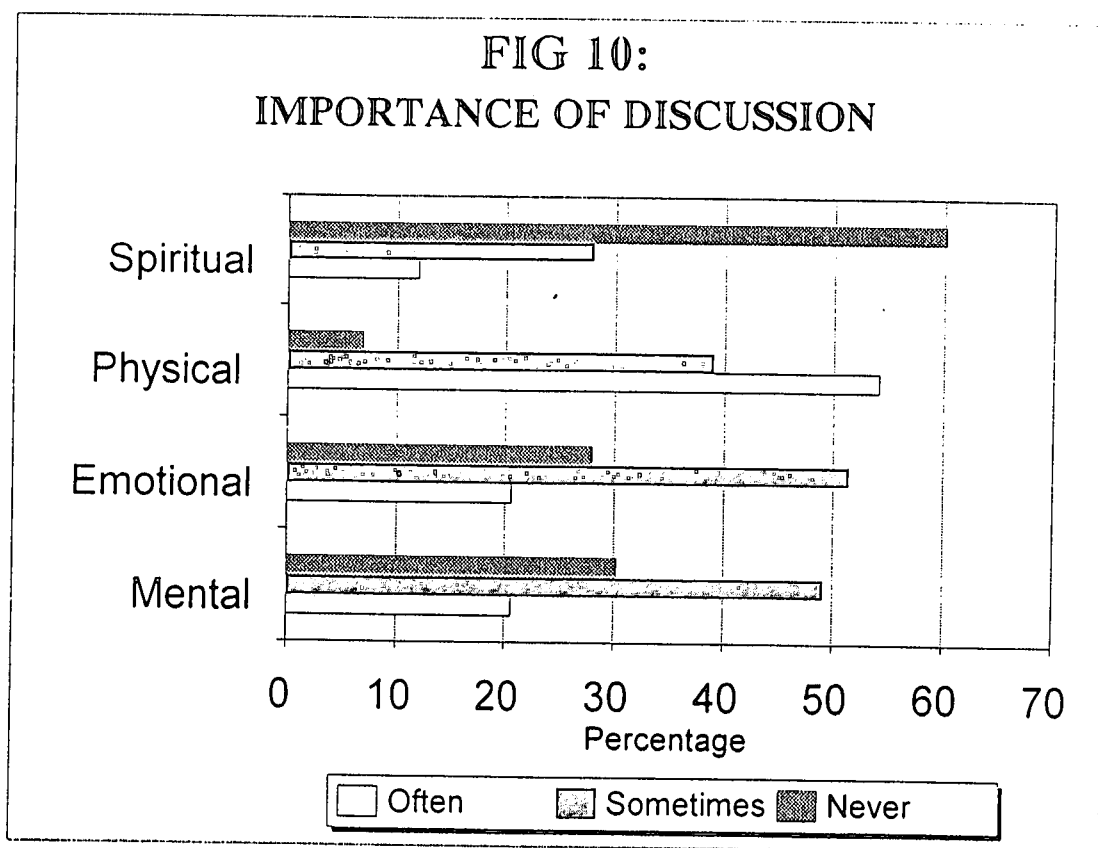
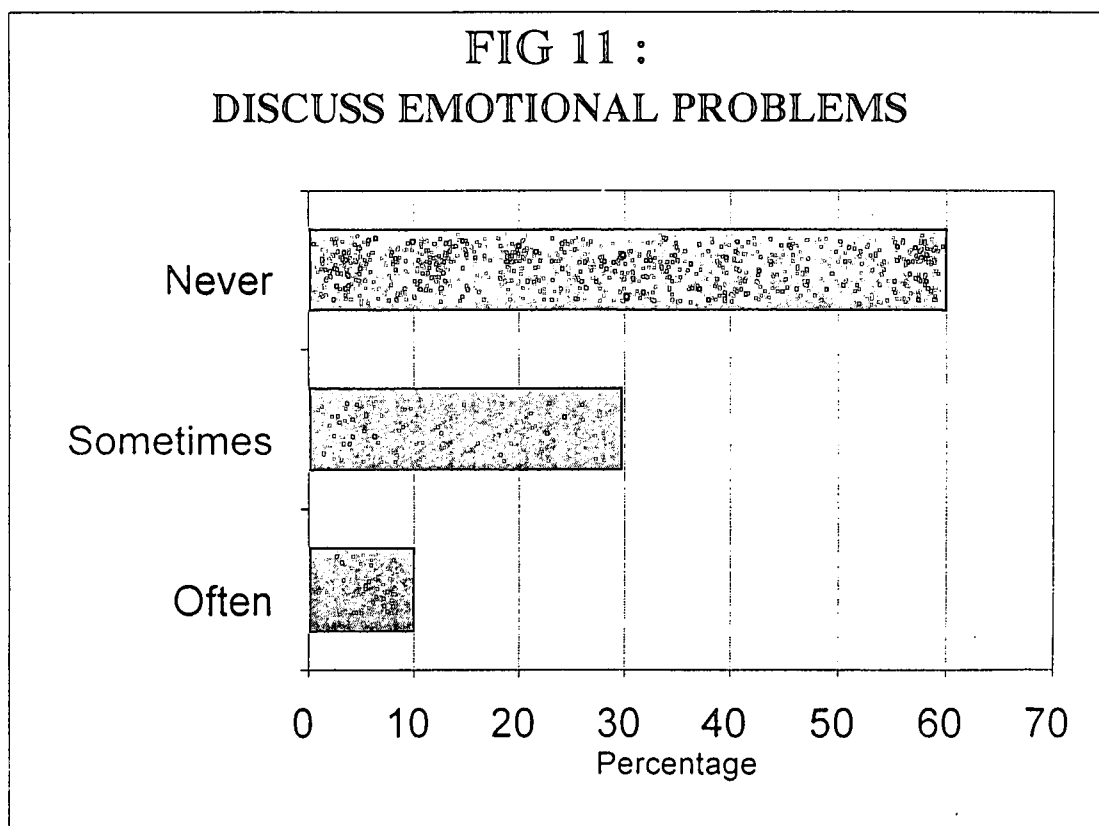


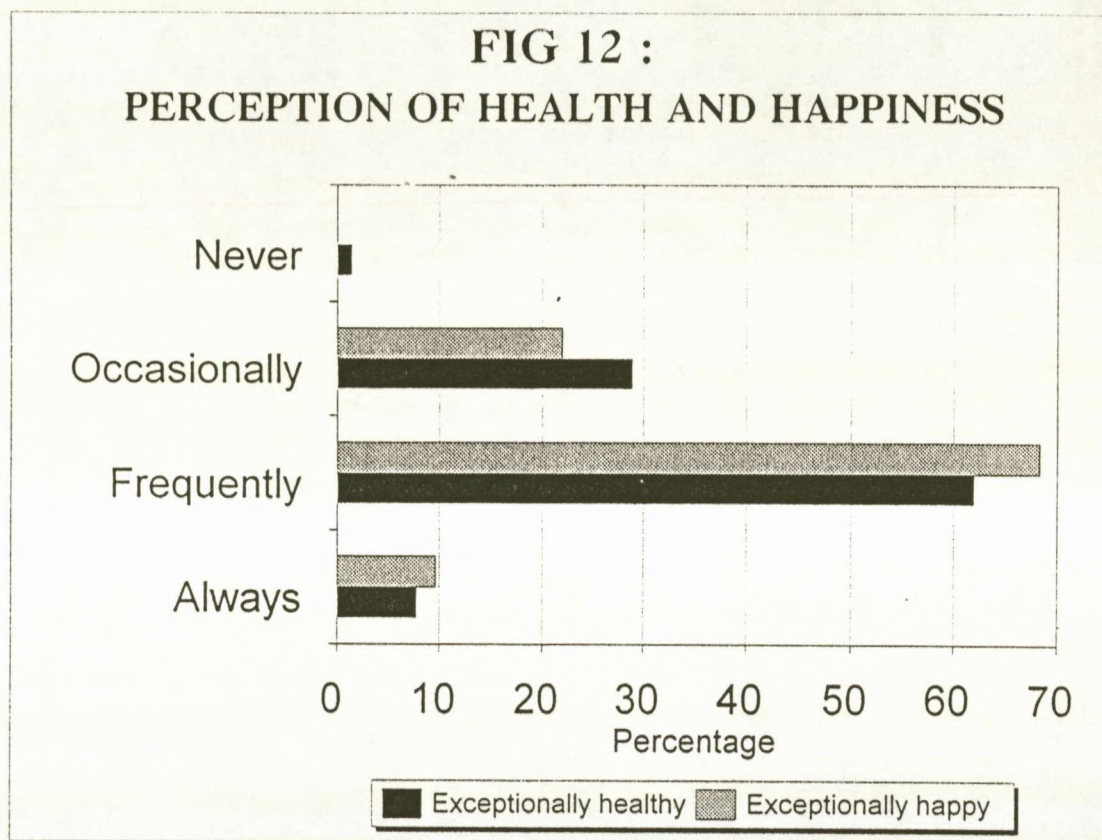
Figure 10 revealed that patients rated discussion of spiritual well-being as the least important in chiropractic health care. As expected, the discussion of physical well-being was rated the most important, because chiropractic is generally associated with the treatment of physical disorders.

4.2.4 Emotional Well-being

According to these results the majority of patients said that their practitioners never discussed emotional problems with them. This is in contrast to the results depicted in Figure 10, where patients rated emotional well-being as the second most important aspect to be discussed in chiropractic health care.



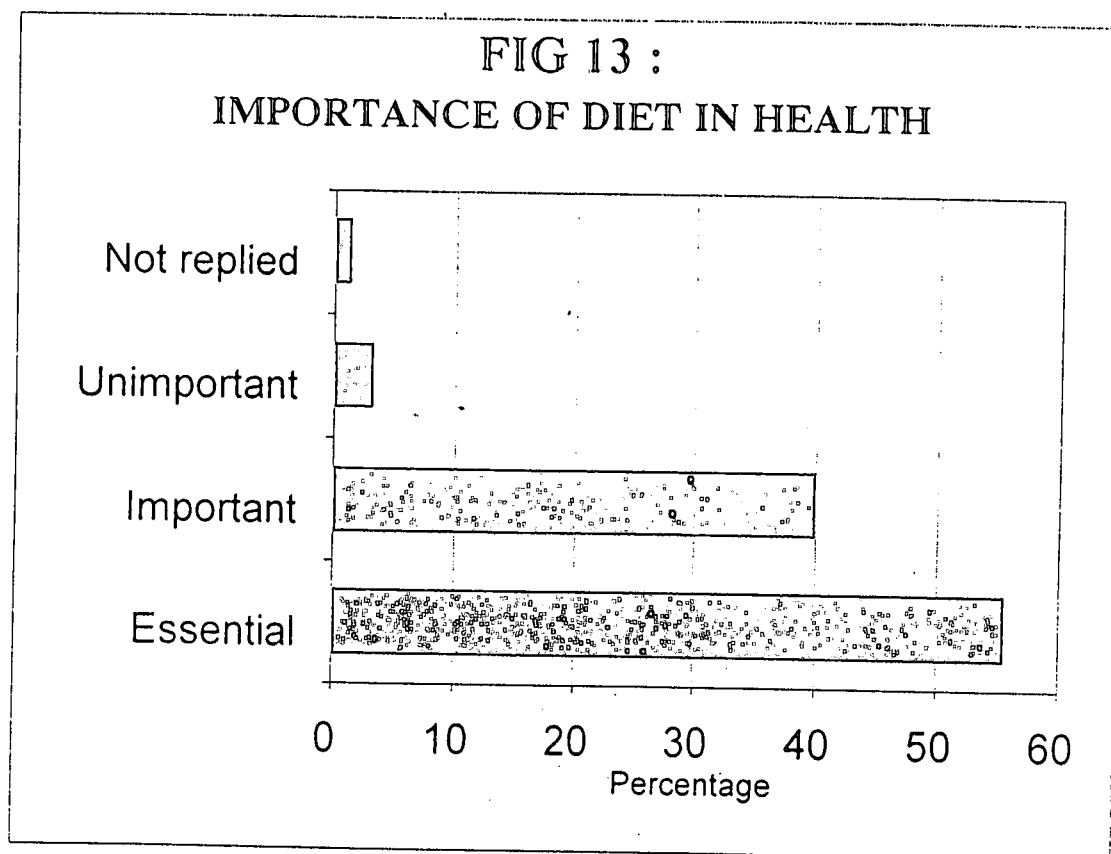
Patients were asked to indicate how often they felt exceptionally healthy and happy. The majority of the patients said that they frequently felt this way. It is possible that this may be the reason why 60.10 percent of the practitioners never discussed emotional problems with their patients.



Cross-tabulation revealed that, from the 9.60 percent of patients who said they always felt exceptionally happy, 33.30 percent also said they always felt exceptionally healthy. Also, the 1.38 percent who never felt exceptionally healthy, only felt exceptionally happy occasionally.

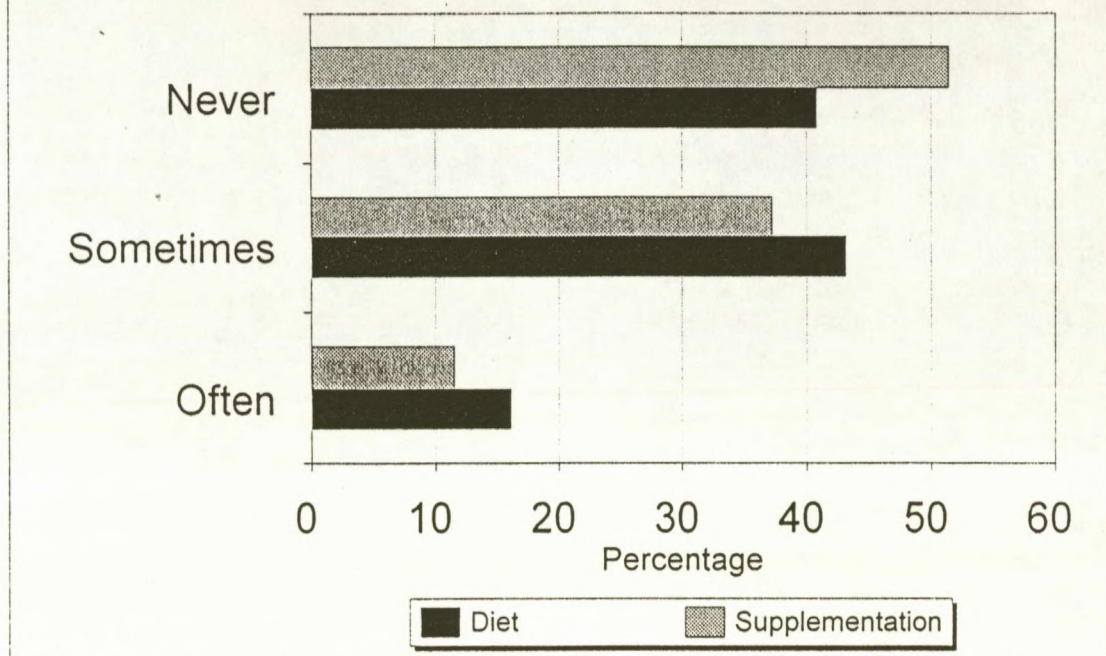
4.2.5 Diet and Nutrition

Patients were asked to rate the influence of their diet on their health. The following figure displays their results.



The very small percentage (3.21 percent) who perceived diet as unimportant implied that the majority of patients were aware of their food-intake and the effect this had on their well-being. Patients were asked whether or not they took additional vitamins or minerals. The majority (70.6 percent) said that they did. This further indicated their awareness of the importance of nutrition.

FIG 14 :
DISCUSS DIET AND SUPPLEMENTATION



Quite a large number of patients (40.80 percent) said that their practitioners never discussed diet, and 51.40 percent said that they never discussed supplementation. Of the 40.8 percent of patients whose practitioners never discussed diet with them, 46.1 percent rated the influence of diet on their health as essential, and 44.9 percent rated it as important. Only 7.9 percent rated it as unimportant. It could therefore be assumed that the practitioners choose not to discuss diet and nutrition with their patients. These results could be seen as an indication that the practitioners need to acquire a greater awareness of this health care component.

The patients' response to a later question revealed that 97.25 percent said they would seriously consider any dietary advice given to them by their practitioners. Also, only 3.67 percent of patients felt that

practitioners were not knowledgeable in the field of diet and nutrition. A further 40.83 percent felt practitioners had expert knowledge and 49.54 percent felt they had some knowledge. These results revealed that the majority of patients perceived practitioners as capable of giving dietary advice. This makes it essential for practitioners to discuss diet with the majority of their patients.

4.2.6 Smoking

It was noted that 82.10 percent of the patients never used smoking as a means of relaxation, and only 10.55 percent often smoked in order to relax. (See Table Four)

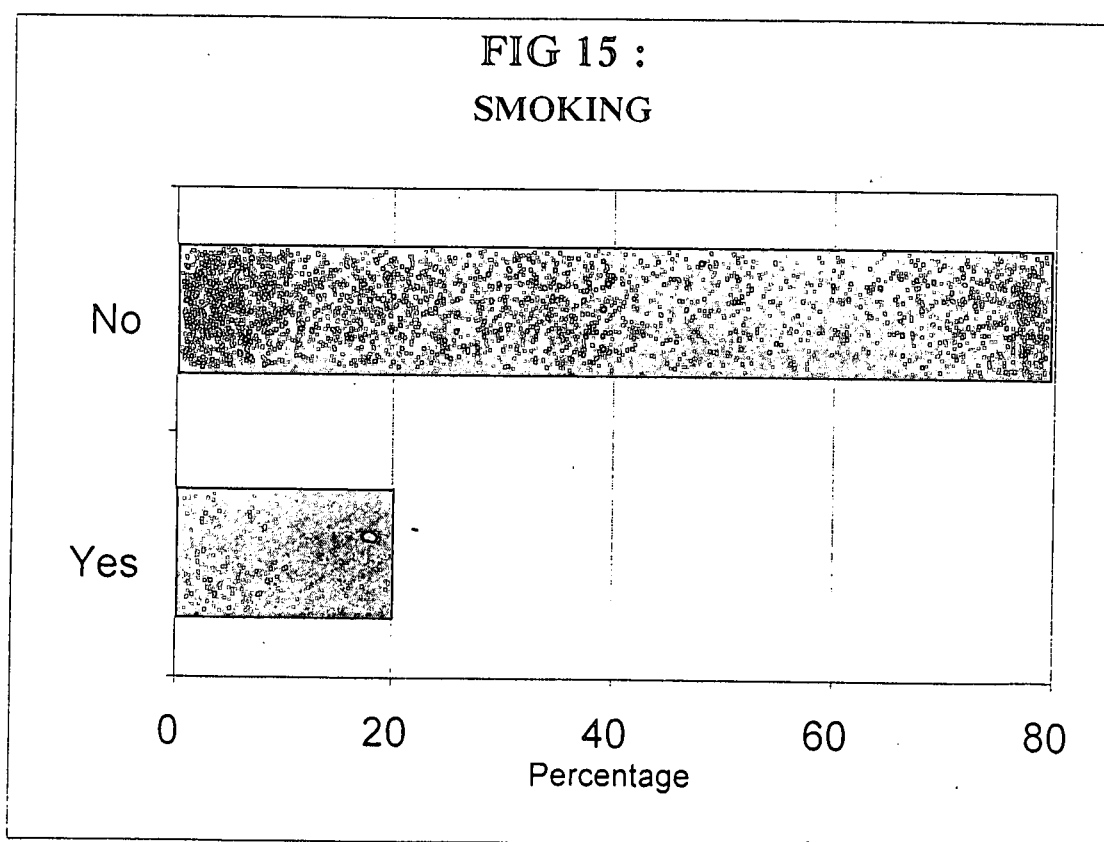
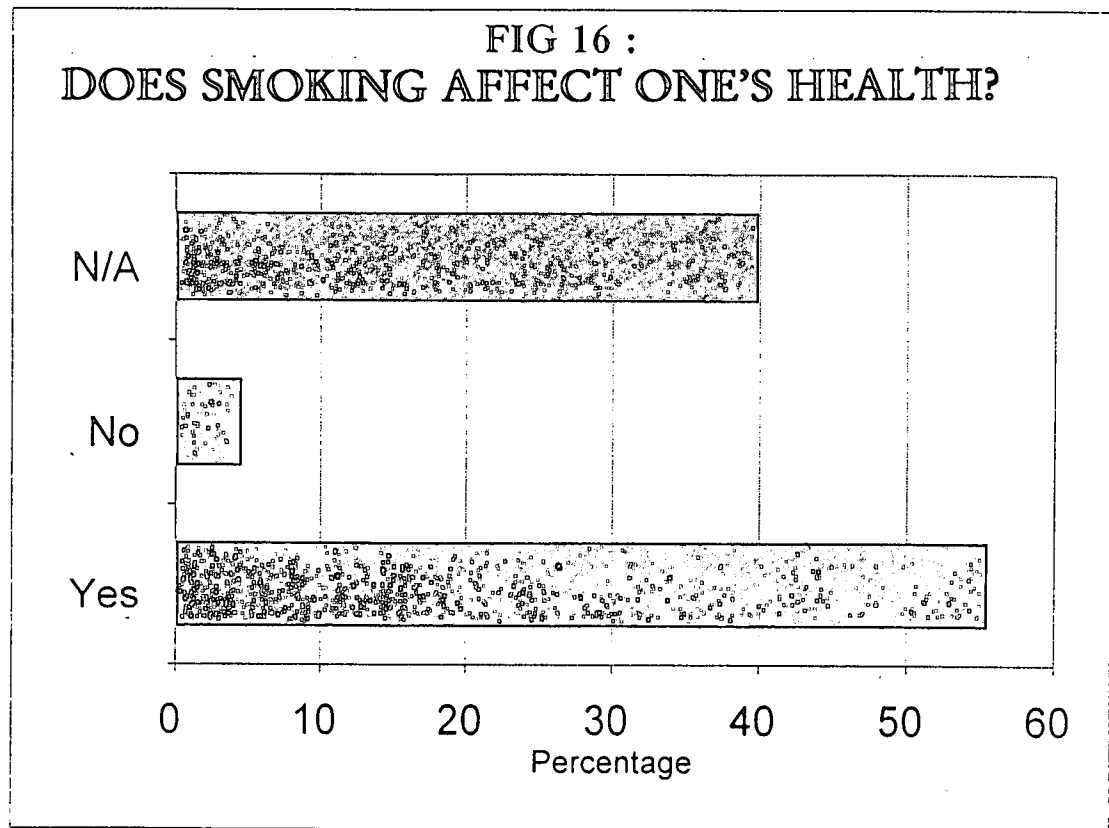
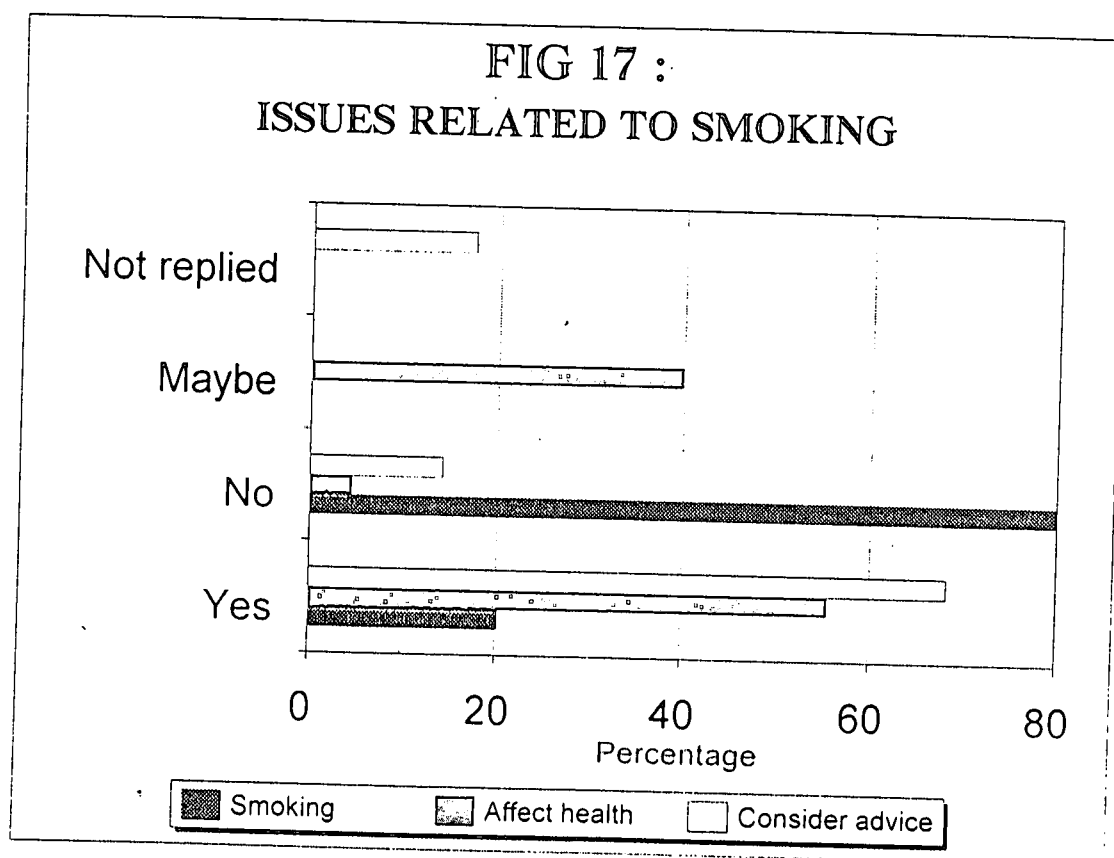


Figure 15 lists the number of smoking and non-smoking patients. A total of 20.20 percent admitted to smoking, and their average seemed to be between 15-20 cigarettes per day, for 10-15 years.



Of the 55.50 percent of patients who felt that smoking affected their health, 31.40 percent smoked, as opposed to the 68.60 percent who did not. Of the 4.60 percents who felt that smoking had no affect on their health, 50 percent smoked and 50 percent did not. This question may have given more accurate results if the wording had not implied that only smokers should answer it. However, it was disconcerting to note that there were a number of patients, even if it was only a small percentage, that felt that their smoking had no effect on their health.

Figure 17 gives some indication of this relation between patients who smoked and those who felt that smoking could affect their health. It also includes those patients who would give serious consideration to advice from their practitioners.



It was encouraging to note that of the 20.20 percent of patients who smoked, 72.70 percent said they would seriously consider any advice from their practitioner, and only 27.30 percent said they would not.

FIG 18 :
DISCUSS SMOKING GENERALLY

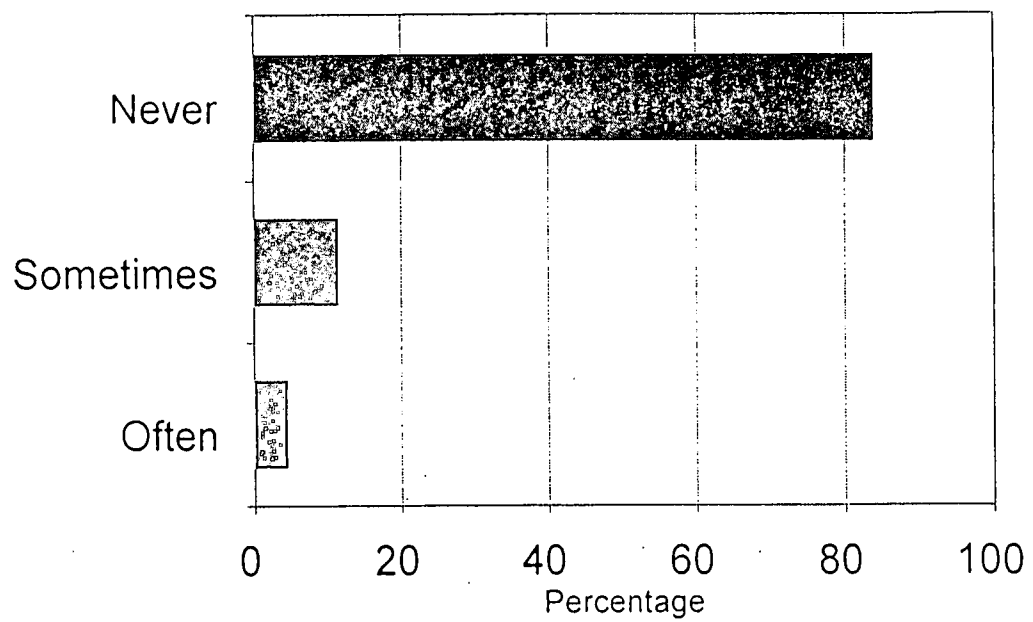
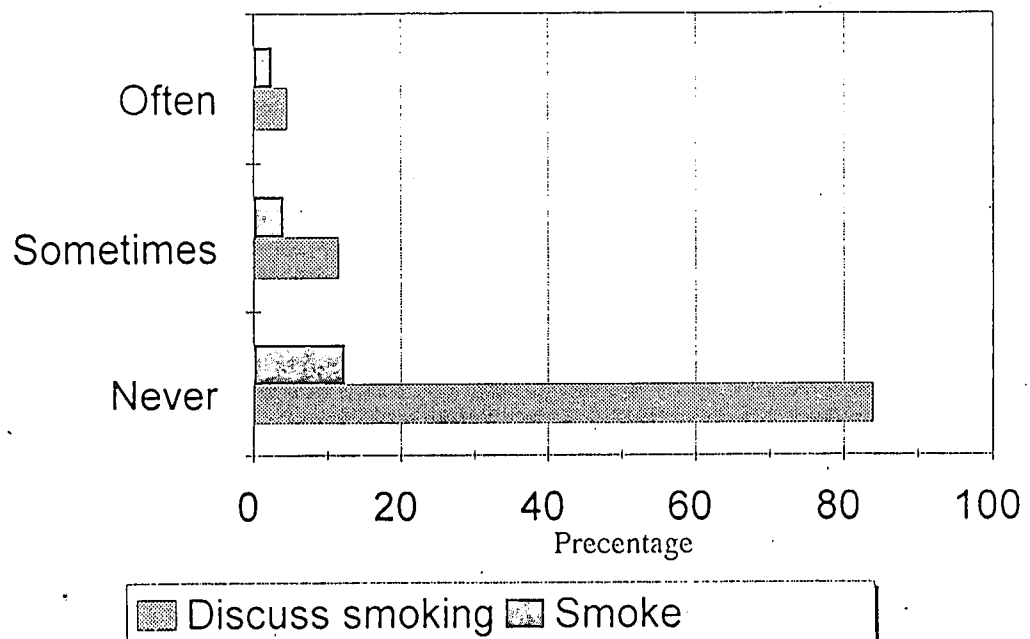


FIG 19 :
DISCUSS SMOKING WITH SMOKERS



The greater majority of patients (83.94 percent) revealed that their practitioners never discussed smoking with them. (See Figure 18) In order to establish whether practitioners discussed smoking more often with smokers or non-smokers, cross-tabulation of Figure 15 and Figure 18 was done. (See Figure 19)

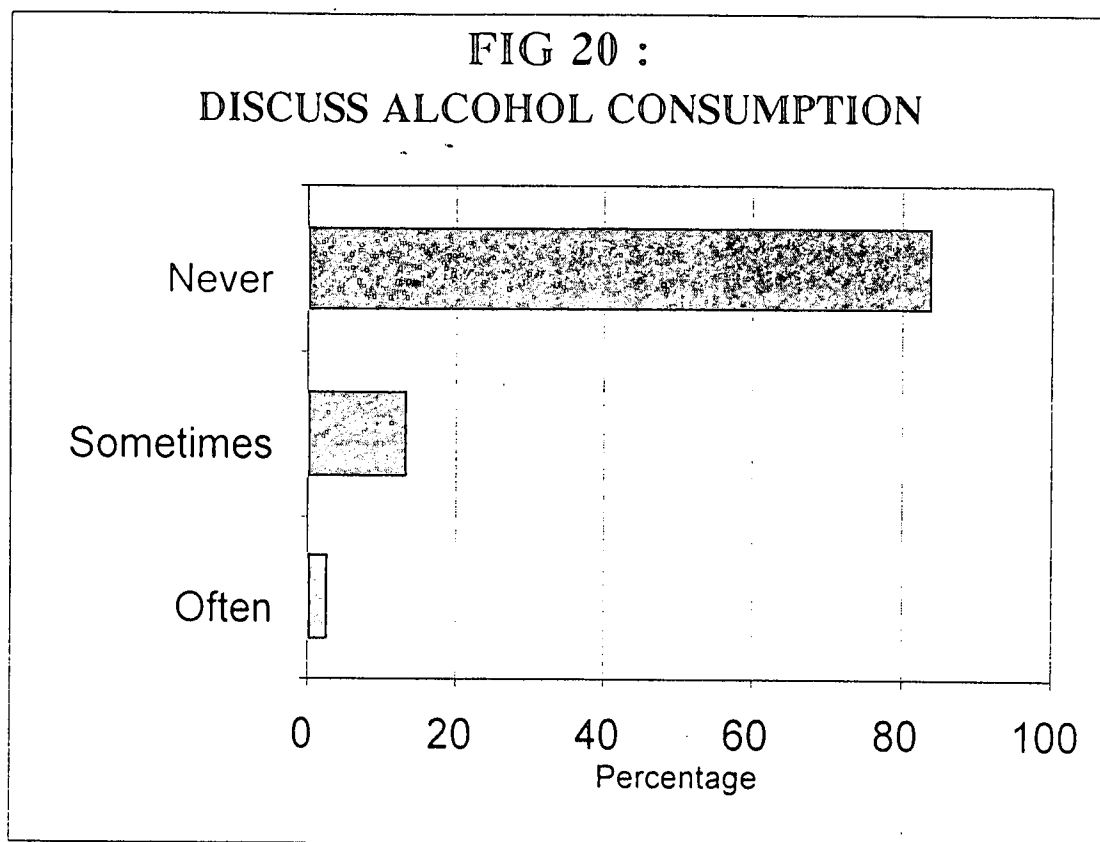
The results revealed that only 15.30 percent of the 83.94 percent of patients whose practitioners never discussed smoking with them, were smokers. On the other hand, 60 percent of patients whose practitioners often discussed smoking with them were smokers, and 40 percent of patients whose practitioners sometimes discussed smoking with them are smokers.

In conclusion, the fact that 83.94 percent of patients responded that their practitioners never discussed smoking with them, is a clear indication that practitioners need to acquire a greater awareness of this health care component.

4.2.7 Alcohol Consumption

This is another factor in the patients' nutritional status evaluation. Table Four revealed that 5.05 percent of patients often used alcohol to relax and 41.74 percent sometimes did. This fact suggested that practitioners need to discuss alcohol consumption with all their patients, in order to make them aware of the effect of alcohol on general health and well-being.

It was alarming to note that the majority of patients (83.94 percent) responded that their practitioners never discussed alcohol consumption with them.



A later question revealed that 77.98 percent said they would seriously consider the practitioner's advice regarding alcohol consumption. Only 9.17 percent said they would not consider such advice. Cross-tabulation revealed that of the 77.98 percent who would seriously consider advice from their practitioners, 80.6 percent replied that their practitioners never discussed alcohol consumption with them. This should make it much easier for practitioners to discuss alcohol consumption, because the majority of patients had indicated a willingness to listen to advice.

4.2.8 Medication and Drug Use

For the purpose of this study, the term "Medication" was used to refer to medicine legally available from any pharmacy, with or without a prescription. The term "Drugs" refers to any substance taken by the individual that is not a legalized substance in South Africa. This would include substances such as heroin, cocaine and dagga.

Table Four revealed that only a small percentage of patients relaxed with the aid of medication in the form of sleeping tablets or tranquillizers. The use of drugs for relaxation was not listed as an option for patients to respond to.

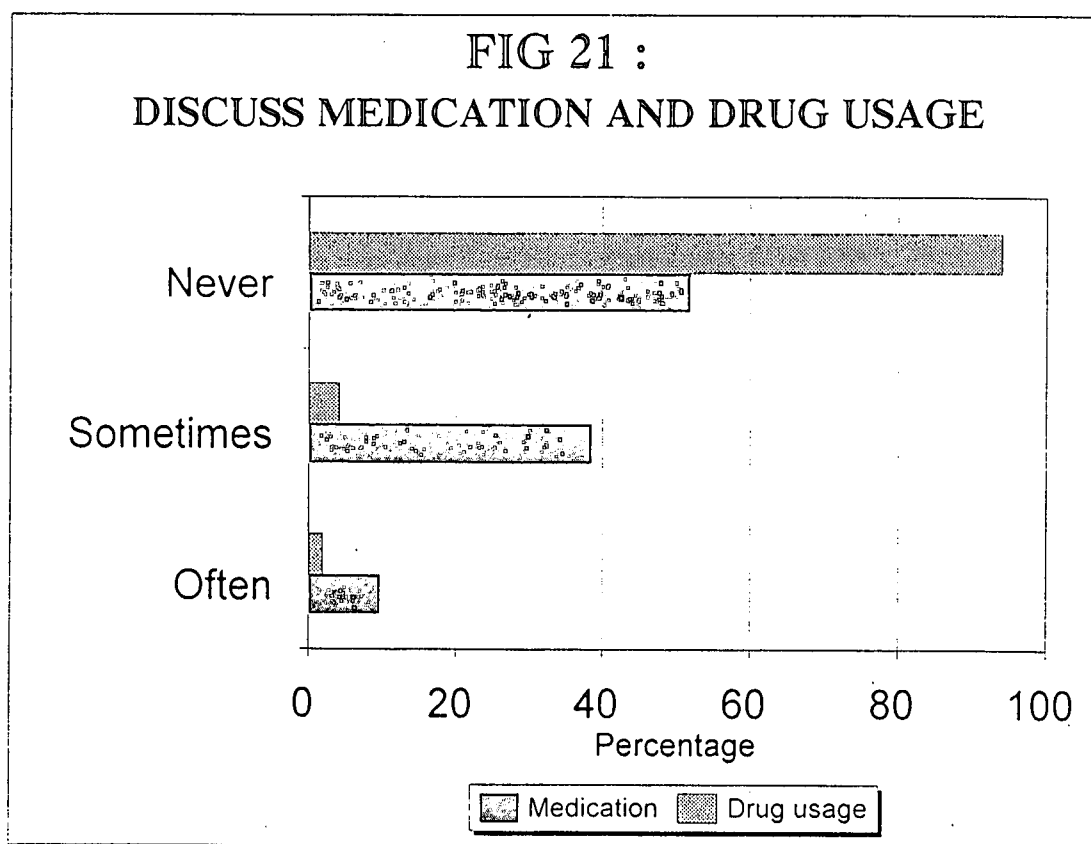


Figure 21 indicated how often patients discussed medication and drug use with their practitioners. It was apparent that the majority of patients (94.04 percent) had never discussed the use of drugs with practitioners. Slightly fewer (51.83 percent), had never discussed any form of medication with their practitioners. The results in Figure 21 suggest that practitioners need to incorporate this aspect of health care to a greater extent in their management programmes.

Cross-tabulation of Table Four and Figure 21 revealed that of the 1.80 percent who often relaxed by taking sleeping tablets, 50 percent said that their practitioners never discussed medication with them. Of the 9.60 percent who sometimes took sleeping tablets to relax, 33.3 percent said their practitioners never discussed medication with them.

Of the 51.83 percent whose practitioners never discussed medication with them, 0.90 percent often relaxed with tranquillizers, 8.80 percent sometimes did, and 90.30 percent never did.

There could be various reasons why so few practitioners discussed drug use or medication with their patients, eg. lack of time, patients not willing to discuss this issue with their practitioners or practitioners are aware that the particular patients does not make use of either drugs or medication. It could also be assumed that some practitioners do not consider the discussion of drug use or medication to fall within the scope of chiropractic.

In a later question, 89.91 percent of the patients responded that they would give serious consideration to advice from their practitioners regarding medication. Only 7.34 percent said they would not consider such advice. There was a 3.21 percent who did not reply to this question. Of the 51.83 percent whose practitioners never discussed medication with them, 81.8 percent indicated that they

would give serious consideration to advice from their practitioners. This is another reason why practitioners should be more aware of this aspect of health care. Practitioners should be educated in recognizing side-effects from medication in order to take appropriate steps in the best interest of patients' health. Unfortunately patients were not asked to indicate whether or not they would give serious consideration to advice from their practitioners regarding drug use. For this reason no further data regarding drug use was available.

Only 10.09 percent of the patients felt that practitioners had no knowledge in the field of medication, and 32.57 percent felt they had expert knowledge. A further 44.95 percent said their practitioners have some knowledge, and 8.72 percent did not reply.

It was surprising that out of the 10.09 percent who felt that practitioners were out of their depth in the field of medication, 81.80 percent said they would give serious consideration to any advice on medication from practitioners. Patients were not asked to respond to the degree of knowledge they perceived their practitioners to have in the field of drug use.

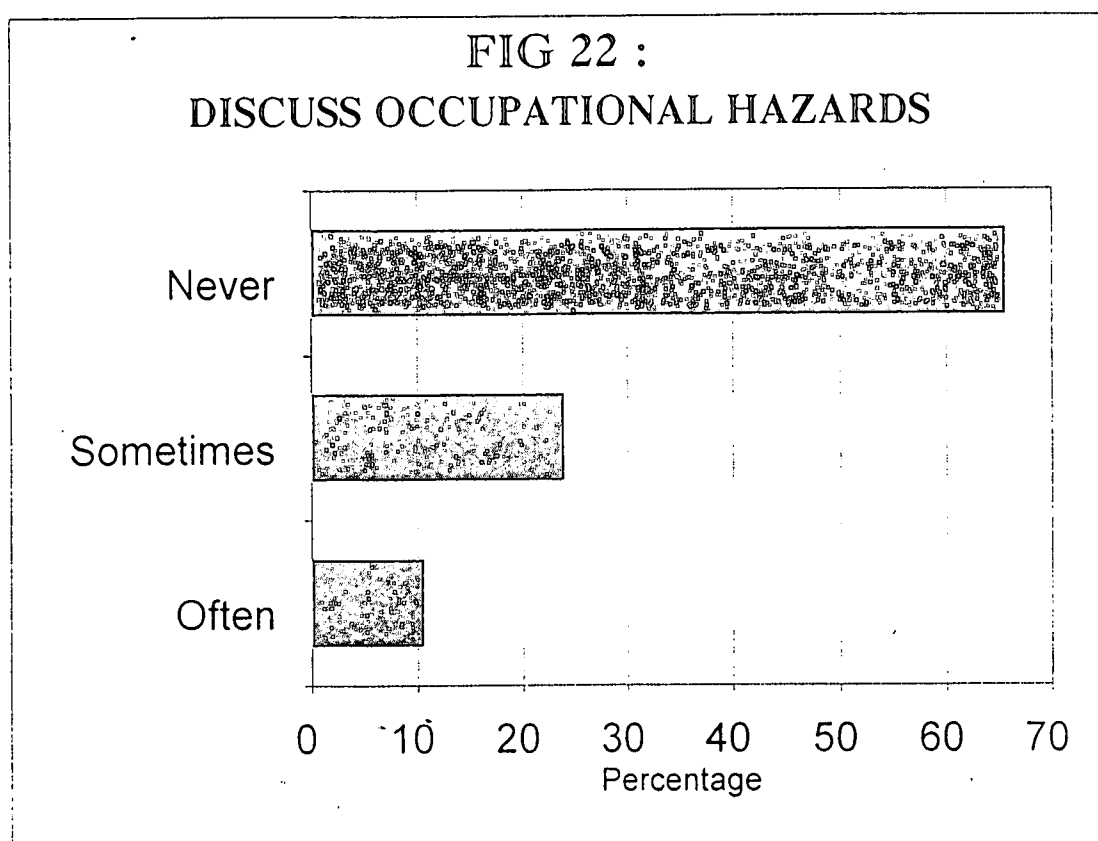
With the limited data available it would seem that most patients trust their practitioners even in a field not usually associated with chiropractic health care, and would consider advice concerning medication, when relevant to their health. This places a bigger responsibility on practitioners to be aware of the nature of their advice.

4.2.9 Occupational Hazards

The patient questionnaire included questions specifically related to occupational hazards such as noise, fumes, smoke, chemicals and vibrations. These are implied in the terms 'life-style' and 'stress factors' in Chapter Two.

Of the total patient number, 32.11 percent said that they were exposed to occupational hazards and 31.2 percent felt that these occupational hazards affected their health.

Patients were asked to state how often their practitioners discussed occupational hazards with them and these results are tabulated in Figure 22.



It was apparent that the majority of patients (65.60 percent) had never discussed occupational hazards with their practitioners. According to these results, practitioners seemed to discuss occupational hazards with 34.4 percent of the patients (10.06 percent plus 23.9 percent), which was 22.29 percent more than the actual percentage of patients who admitted to being exposed to occupational hazards.

Cross-tabulation of Question 14 and Figure 22 revealed that of the 65.60 percent whose practitioners never discussed occupational hazards with them, 21.7 percent were exposed to occupational hazards. In light of the above, it could be concluded that although a percentage of practitioners seemed to be aware of the influence of occupational hazards on the lives of their patients, there still was a significant number for whom this aspect of health care was neglected.

4.2.10 Surgery

**TABLE FIVE : PRACTITIONERS' KNOWLEDGE IN THE FIELD OF
SURGERY AS RATED BY THE PATIENT**

Expert knowledge	Some knowledge	Out of depth	Not answered
32.57%	44.95%	13.76%	8.72%

In light of the above, it could be assumed that the majority of patients felt that practitioners had knowledge in the field of surgery. Also, 89.45 percent responded that they would give serious

consideration to any advice regarding surgery from their practitioners. Only 7.34 percent said they would not seriously consider such advice and 3.21 percent did not reply to this question.

Cross-tabulation between Question 19 and Table Five revealed that of the group of patients who said they would not seriously consider advice regarding surgery from their practitioners, there were a number of patients who considered practitioners to be knowledgeable in the field of surgery. Also, from the 13.80 percent who felt practitioners to be out of their depth in the field of surgery, 66.70 percent said they would give such advice serious consideration.

From the slight contradiction in the above figures it can be concluded that some patients were not quite sure what the extent of their practitioners' knowledge in the field of surgery was, but they would nevertheless be willing to consider their advice in the matter.

4.2.11 Patients' Experience of the Practise of Wellness

Figure 23 tabulates the results of Question 18 where patients were asked to indicate how often their practitioners discussed the various issues pertaining to wellness with them. Figure 23 brings together the various results discussed in the sub-sections thus far.

It becomes apparent that the most frequent areas of discussion between practitioners and patients (including the responses "often" and "sometimes") were exercise, followed by recreational activities, diet and stress management. They seemed to show least interest in patients' drug usage, smoking habits and

alcohol intake. The rest of the categories were fairly evenly distributed. However, in a wellness approach to health care all areas should be discussed more frequently.

4.2.12 Demographic Data

In the light of the fact that so few patients and practitioners participated, it may be of importance to note whether or not common characteristics exist in those who responded. It may be that only a certain type of patient responded, thus representing only a section of the patient population.

TABLE SIX : PATIENTS' MARITAL STATUS

Married	Single	Divorced	Widowed
73.08%	11.54%	10.99%	4.39%

Of the 218 patients who participated, the majority (73.08 percent) were married. This may be significant in that married people may be more aware of the well-fare of their spouses, and therefore are more aware of their own personal health. It is interesting, but not really significant to note that the percentage of single patients (11.54 percent) is almost equal to that of divorced patients (10.99 percent).

It may also be assumed that children will add to a parent's awareness of health and well-being. Only 184 of the 218 patients indicated the number of children (if any) they had. These results were tabulated in Table Seven.

TABLE SEVEN : NUMBER OF CHILDREN IN PATIENT GROUP

NUMBER OF CHILDREN PER PATIENT	Percentage of patients
0	22.94
1	6.88
2	24.77
3	21.10
4	5.96
5	2.29
6	0.00
7	0.46
Patients not replied	15.60

These results revealed that the majority of those patients who responded (84.40 percent) were parents. This could be a significant common factor in the patient group, implying that the general response may be holistically orientated, because of the greater awareness of health and well-being in the family circle. Children might also be responsible for an increased need of chiropractic care for the parents, especially parents with infants and/or toddlers.

TABLE EIGHT : RACE OF PATIENTS

Race	Percentage of patients
White	90.82 %
Black	4.59%
Asian	4.59%

It was also noted that a large proportion of patients (90.82 percent) were white, subjected to the Western model of health care. However, the majority of black, coloured and Asian South Africans are not subject to this model. Traditional medicine practised by black, coloured or asian cultures may not be based on reductionism or holism as we understand it. The results may have been very different if the majority of patients had not been white. Different cultures have different belief systems, therefore attitudes toward health and well-being displayed in these results may not accurately reflect the attitudes of this un-tapped segment of the community.

TABLE NINE : SEX OF PATIENTS

Sex	Percentage of patients
Female	70.81%
Male	29.19%

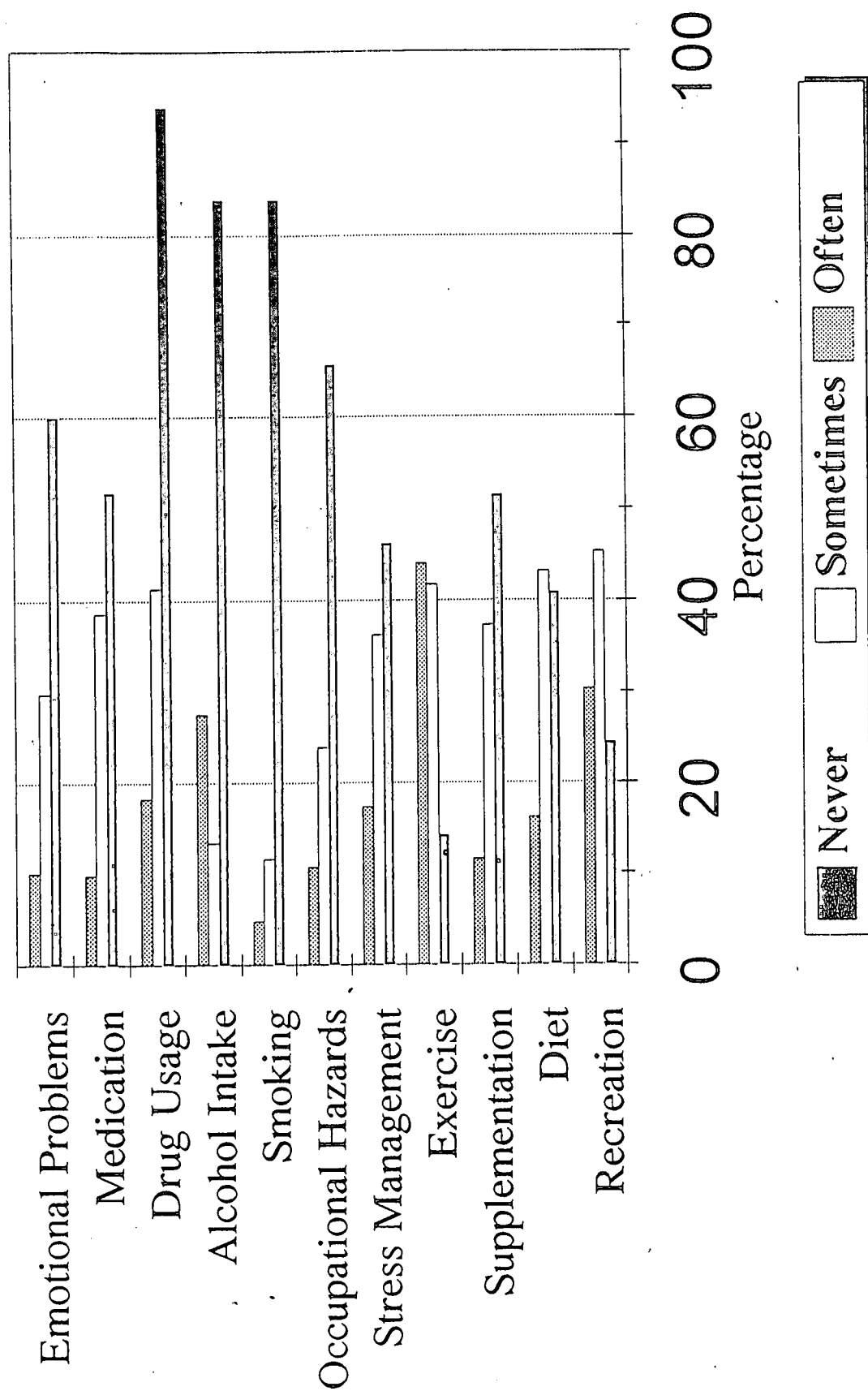
The statistical evaluation also revealed that more females (70.81 percent) than males (28.65 percent) responded to the questionnaire. It is interesting to note that this is not consistent with other demographic studies done in chiropractic, where data revealed that the ratio between male female patients are basically equal. (Phillips 1981, Phillips and Butler 1982, Breen 1977) This may be significant in that females are generally considered to be more sensitive to the needs of their families and of themselves. This is presumably because of their upbringing and the fact that females are expected to be 'in touch' with their own feelings. The 'motherly' or 'nesting' instincts associated with women in general may also contribute to a greater awareness of health-related issues. It may be argued that the well-being of the family is usually more the concern of the women, than the man. In the modern world such a presumption may not be relevant any more, since females are seeking equality not only in the work place, but also in the family unit. This gives males more responsibility towards the welfare of the family, and therefore greater awareness of family health care needs.

It was also noted that the majority of participating patients were English-speaking, (86.96 percent). It could be argued that cultural differences also exist between different language groups, and that this may be significant in terms of the responses generated by the patients. However, it is very difficult to speculate to what degree the English-speaking patient's perception of health and well-being may differ for instance from that of the Afrikaans patient. For this reason, language cannot really be viewed as a common characteristic that may be influential in the type of response generated.

When evaluating the average age of the respondents it must be remembered that patients younger than the age of 18 were not allowed to participate. The average age of patients was 54. Older people are generally associated with greater maturity and a fuller understanding of life in its totality. Seeing that the majority of patients were of a more mature age, their responses might reflect a better understanding of the concept of holism in their own lives.

In conclusion, it is clear that the patient group was not representative of the South African population as a whole. It reflects mainly the attitudes of the English-speaking, married, white mother of about 54 years of age.

FIG 23 :
PATIENTS' EXPERIENCE OF WELLNESS



4.3 RESULTS OF PRACTITIONER QUESTIONNAIRES

In order to establish what the practitioner's perception of holism in health care is, and to determine the degree to which the practise of wellness forms part of the practitioner's practice, this questionnaire will be discussed in two sections.

4.3.1 Section One

The first part of the questionnaire contained issues to determine the practitioners' perceptions of holism and the incorporation of wellness practice in their patient management programmes. These factors are the same as those dealt with in the patient questionnaire. (See section 4.1.)

4.3.2 Section Two

The second section of the practitioner questionnaire was aimed at establishing how practitioners perceived the role of a chiropractor in health care; as well as how practitioners practise chiropractic in the context of patient examination and specific treatment procedures.

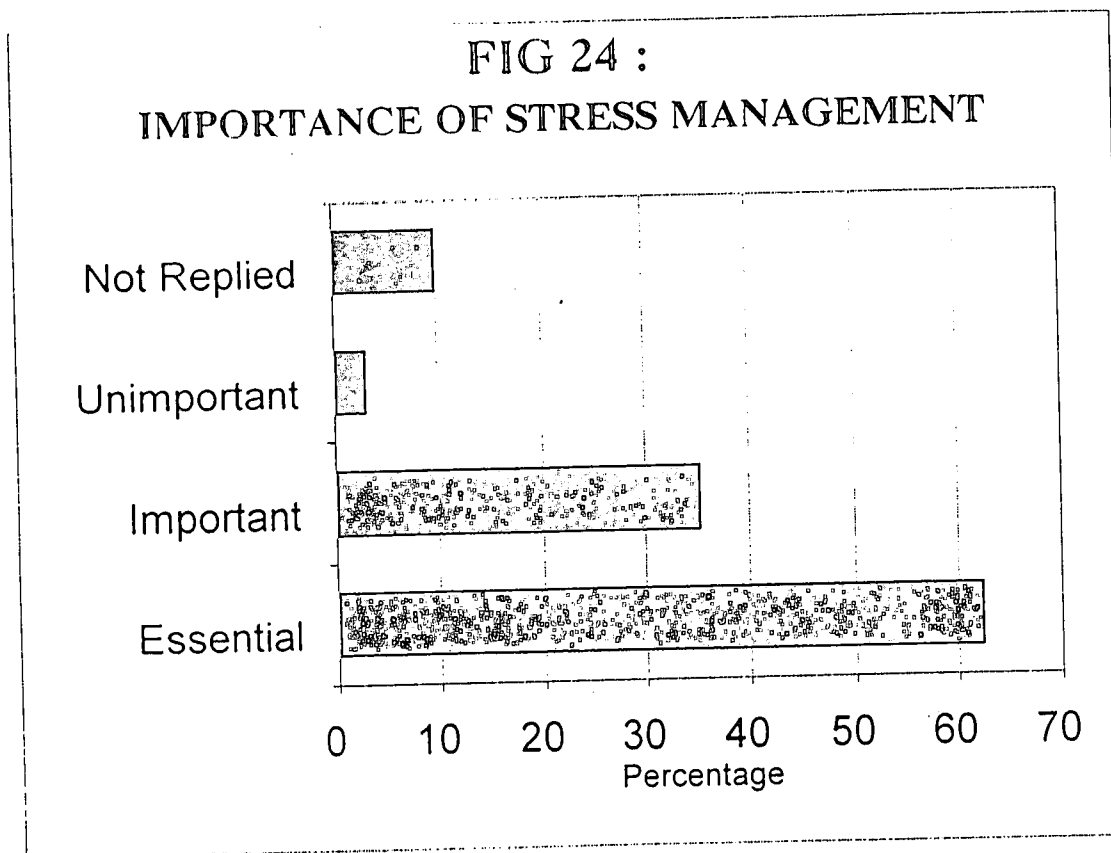
The practitioners were also asked to give details regarding the nature of their diagnostic procedures, and the nature of their diagnoses.

This section was aimed at establishing the degree to which the practise of wellness forms part of chiropractic health care in South Africa, and also at determining which techniques and diagnostic procedures are most common amongst South African chiropractors. The results of this section could be used to evaluate the educational model currently employed at the Technikon Natal, and to make suggestions about current chiropractic education and/or continuing education for the practitioners in this field.

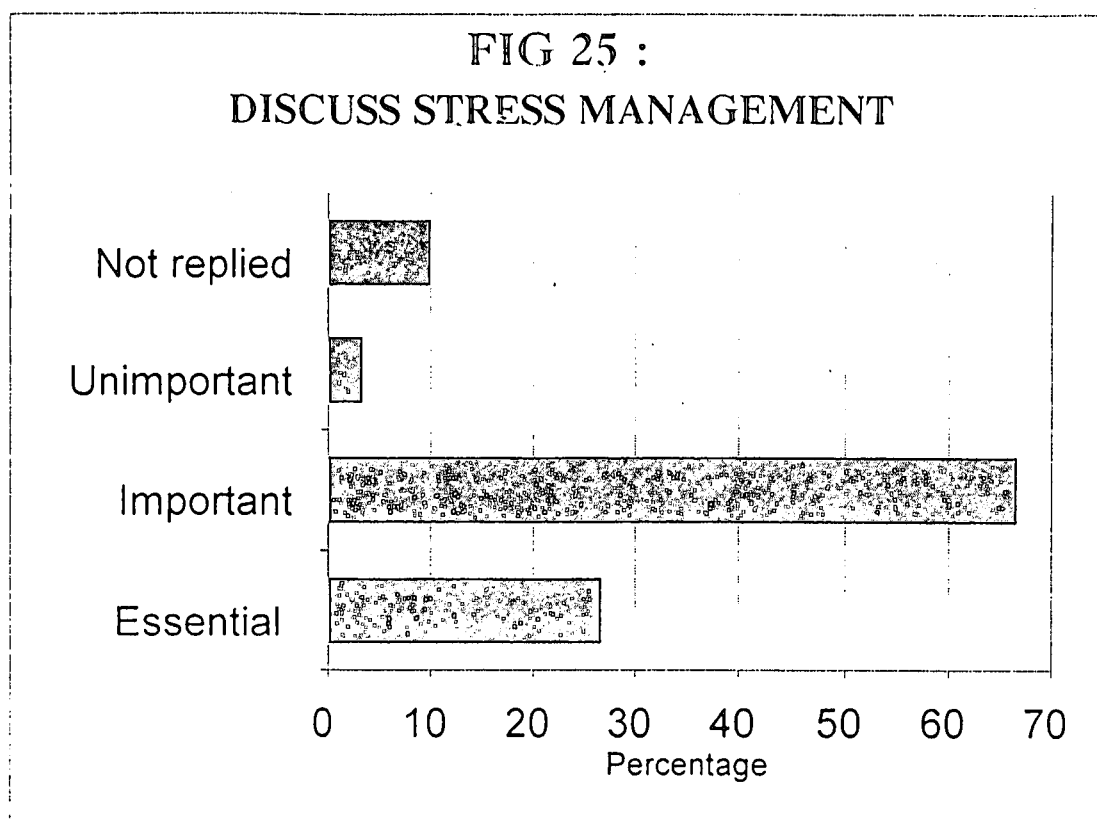
4.3.3 Results of Section One

4.3.3.1 Stress Management

Of all the practitioners who participated in the study, 96.88 percent felt that stress influenced their own health. Only 3.13 percent felt it had no influence. A similar percentage (3.23 percent) also felt that adequate stress management was unimportant in personal good health. (See Figure 24)



Practitioners were also asked to indicate how important they rated the discussion of stress management with patients. The results were as follows:



Only 3.33 percent (one practitioner) responded that the discussion of stress management is unimportant and 9.99 percent (three practitioners) did not respond to this question. The majority of practitioners obviously rated the discussion of stress management as important.

A later question revealed that 87.5 percent said they do discuss stress management with their patients. Question 10 was aimed at identifying which techniques the practitioners most frequently suggest when they advise their patients on stress management. Twelve techniques were listed, and practitioners were asked to indicate the frequency with which they make use of each specific technique.

TABLE TEN : FREQUENCY OF VARIOUS STRESS MANAGEMENT TECHNIQUES RECOMMENDED BY PRACTITIONERS

Techniques	Always	Frequently	Sometimes	Never
Exercise	28.13%	56.25%	3.13%	12.50%
Vacations	12.50%	40.60%	25.00%	21.90%
Hobbies	3.13%	43.75%	28.13%	25.00%
Sleeping	21.88%	37.50%	6.25%	34.38%
Reading	3.13%	12.50%	37.50%	46.88%
Meditation	6.25%	18.75%	25.00%	50.00%
Socializing	0.00%	21.90%	25.00%	53.10%
Prayer	3.13%	21.88%	21.88%	53.13%
Medication	6.25%	9.38%	25.00%	59.38%
Bio-Feedback	6.25%	9.38%	18.75%	65.63%
Watching Television	0.00%	6.25%	21.88%	71.88%
Hypnosis	0.00%	0.00%	9.38%	90.63%

It was interesting to note that exercise was the most popular technique, and hypnosis was the least popular technique, used or suggested by practitioners as a form of stress management.

The literature review revealed that several authors recognized how daily activities such as occupation, family-life, habits and hobbies (life-style) can contribute to an individual's stress level. [Sanford (1977) and Strang (1984)]. In the light of this, they felt it essential to focus on patients' life-styles in order to identify any stressors that may have a negative influence on their good health. (See Chapter Two)

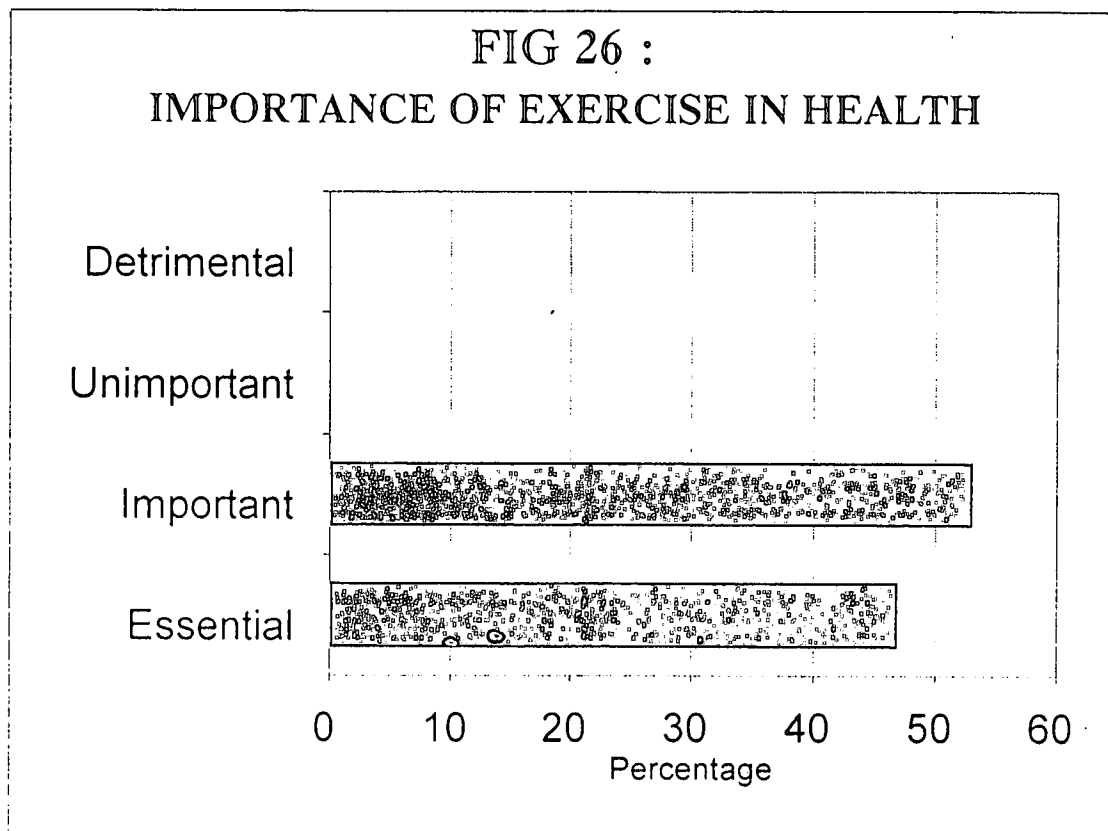
Question 12 asked the practitioners whether they thought a patient's daily activities could influence his/her health. All 32 practitioners (100 percent) answered "yes". It could therefore be assumed that all 32 practitioners would discuss their patients' life-style with them in order to identify any stressors.

However, Question 22 required practitioners to rate how important they thought it was to discuss the listed issues pertaining to life-style with their patients. Results revealed that some felt it was unimportant to discuss some of these issues. One (3.33 percent) felt it unimportant to discuss emotional problems and two practitioners (6.45 percent) felt it was unimportant to discuss recreation, supplementation, stress management, and occupational hazards; despite the fact that these practitioners stated in Question 12 that all these factors can influence their patients' health.

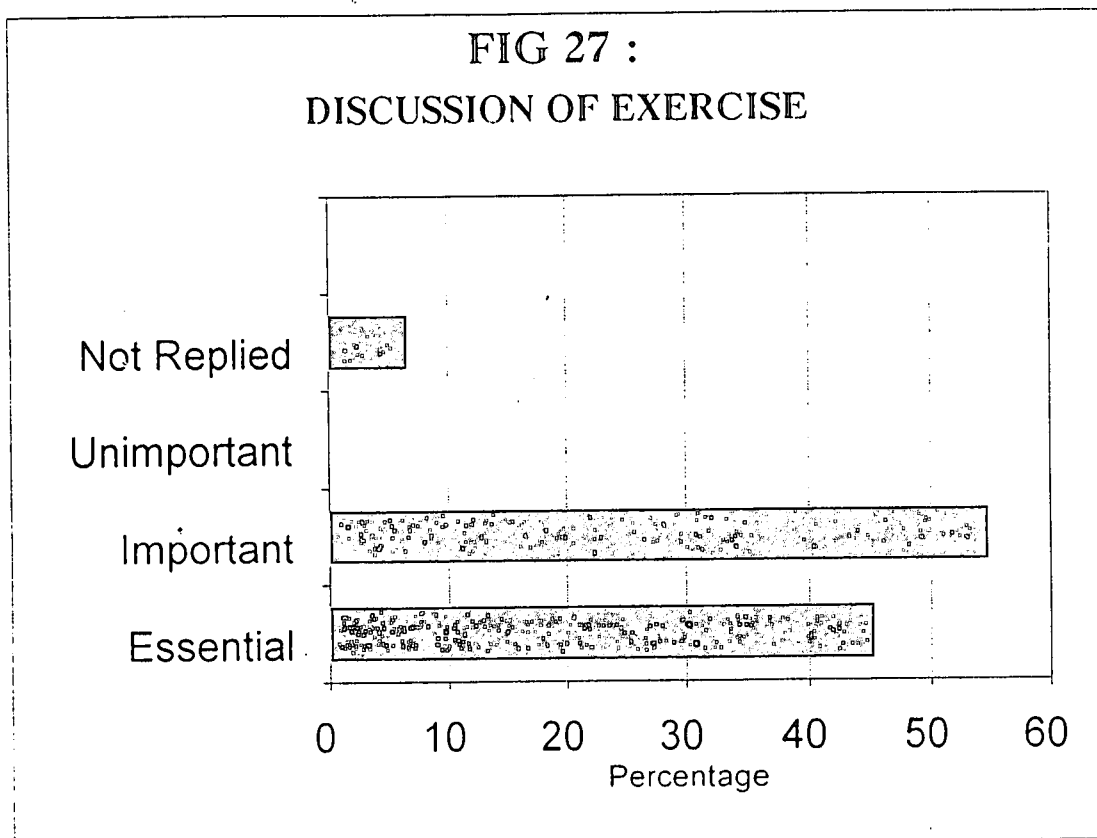
Needless to say, the overall results were quite positive, in that the majority of practitioners seemed to practise what they believed when approaching the matter of life-style in patient management programmes.

4.3.3.2 Exercise

It must be remembered that exercise was the most popular technique suggested by practitioners for stress management. (See Table Ten)



It is very encouraging to note that not one practitioner rated exercise as unimportant or detrimental.



As expected, Figure 27 confirmed that not one practitioner rated the discussion of exercise as unimportant. This is not surprising as a large part of chiropractic is associated with the treatment of musculo-skeletal dysfunctions resulting from physical activities. However, 6.46 percent failed to answer the question.

Practitioners were asked how often an individual should participate in a sporting activity or exercise routine, and what the average duration of such an exercise session should be. The results were tabulated as follows.

TABLE ELEVEN: RECOMMENDED FREQUENCY FOR PARTICIPATION IN SPORTING ACTIVITY OR EXERCISE ROUTINE

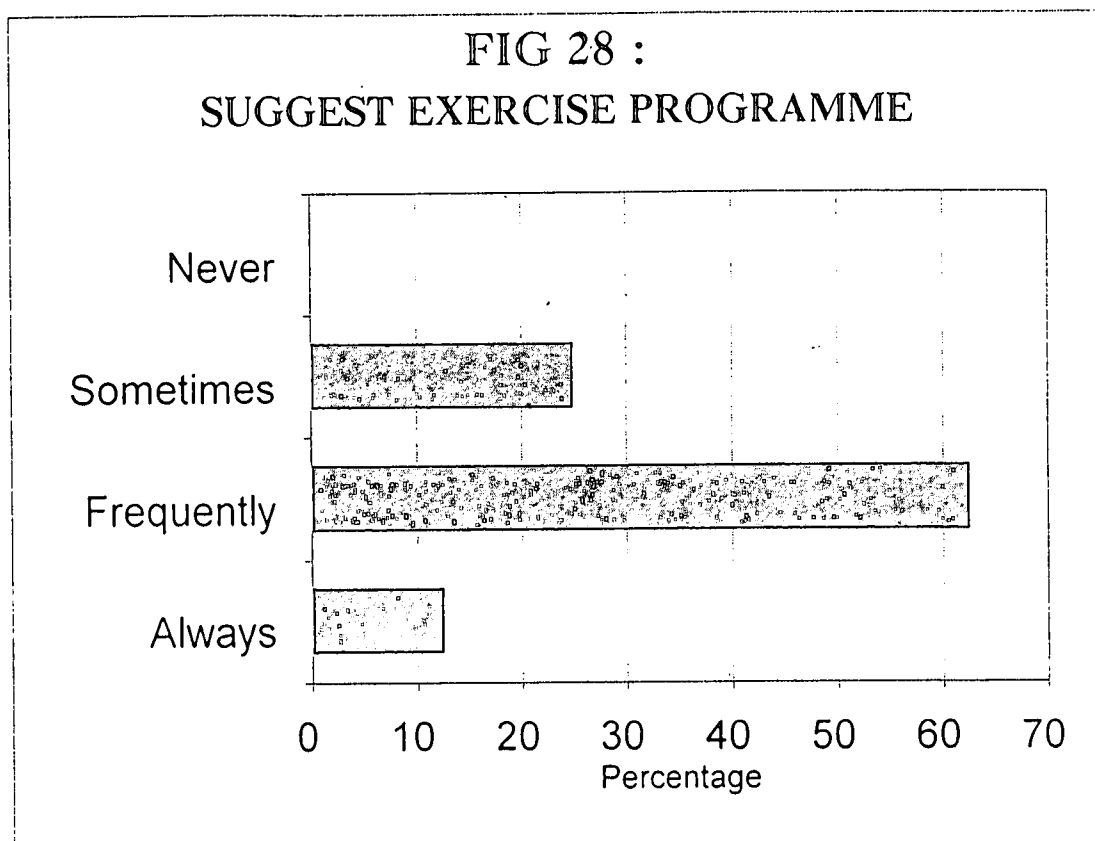
Daily	5 - 6 times per week	2 - 4 times per week	Never
12.50%	12.50%	75.00%	0.00%

TABLE TWELVE: DURATION OF EXERCISE SESSION

1 - 15 min	15 - 30 min	30 - 60 min	more than 60 min
12.50%	21.88%	59.38%	6.25%

The majority of practitioners believed participating in sporting activity or an exercise programme between two to four times per week to be an ideal, and that each session should last between 30 - 60 minutes.

In view of all the practitioners being aware of the importance of exercise and the discussion of exercise in health care, it should be interesting to note how many practitioners suggest specific exercise programmes to their patients.



From Figure 28 it can be concluded that the majority of practitioners were aware of the importance of exercise in health, but felt that not all patients were in need of specific exercise programmes.

4.3.3.3 Religion

For the purpose of this study, religion or spirituality will be assessed in terms of prayer and meditation only. The incorporation of a religious component in chiropractic health care will be

investigated in terms of the degree to which meditation and prayer, as a form of stress management, is dealt with by practitioners.

Question 11 revealed that 28 practitioners (90.32 percent) felt that religion had a contribution to make towards achieving good health. Only 3 practitioners (9.68 percent) did not agree with this.

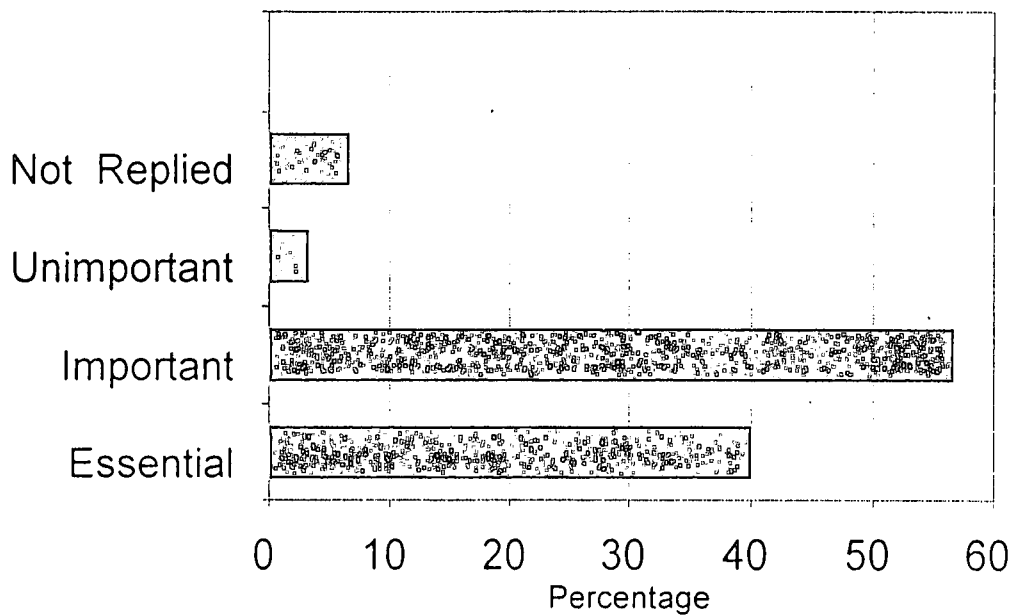
Question Ten revealed that 17 practitioners (53.13 percent) said they never suggested prayer as a form of stress management to their patients, and 16 said that they never suggested meditation. Of the 17 practitioners who said that they never suggest prayer, 13 (81.3 percent) felt that religion did make a contribution towards achieving good health. (See Table Ten).

Unfortunately, it was not possible to determine the degree to which practitioners discuss formal religion or spirituality and its contribution to patients' health, as this type of question was excluded. Ideally, formal religion and spirituality should have been included in Question 22 of the practitioners' questionnaire.

4.3.3.4 Emotional Well-being

Question Eight revealed that all of the practitioners felt that their patients' emotions could influence their health. A subsequent question revealed that only one rated the discussion of emotional problems as unimportant. Two practitioners did not respond to this latter question. (See Figure 29)

FIG 29 :
DISCUSSION OF EMOTIONAL PROBLEMS



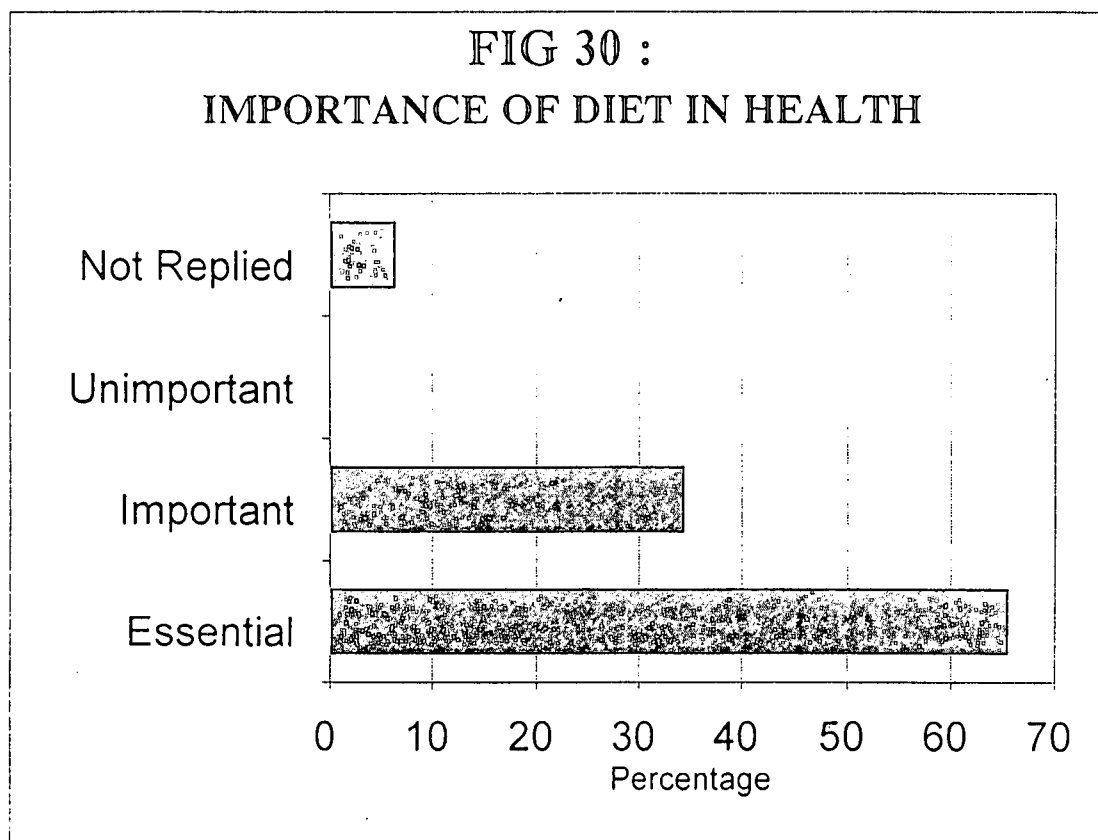
It can therefore be concluded that the majority of practitioners would always discuss emotional problems with their patients.

4.3.3.5 Relaxation

Question 13 revealed that 25 practitioners (78.13 percent) felt that patients should relax daily, and four (12.5 percent) felt that patients should relax between two to four times per week. The other three practitioners (9.38 percent) said between five to six times per week.

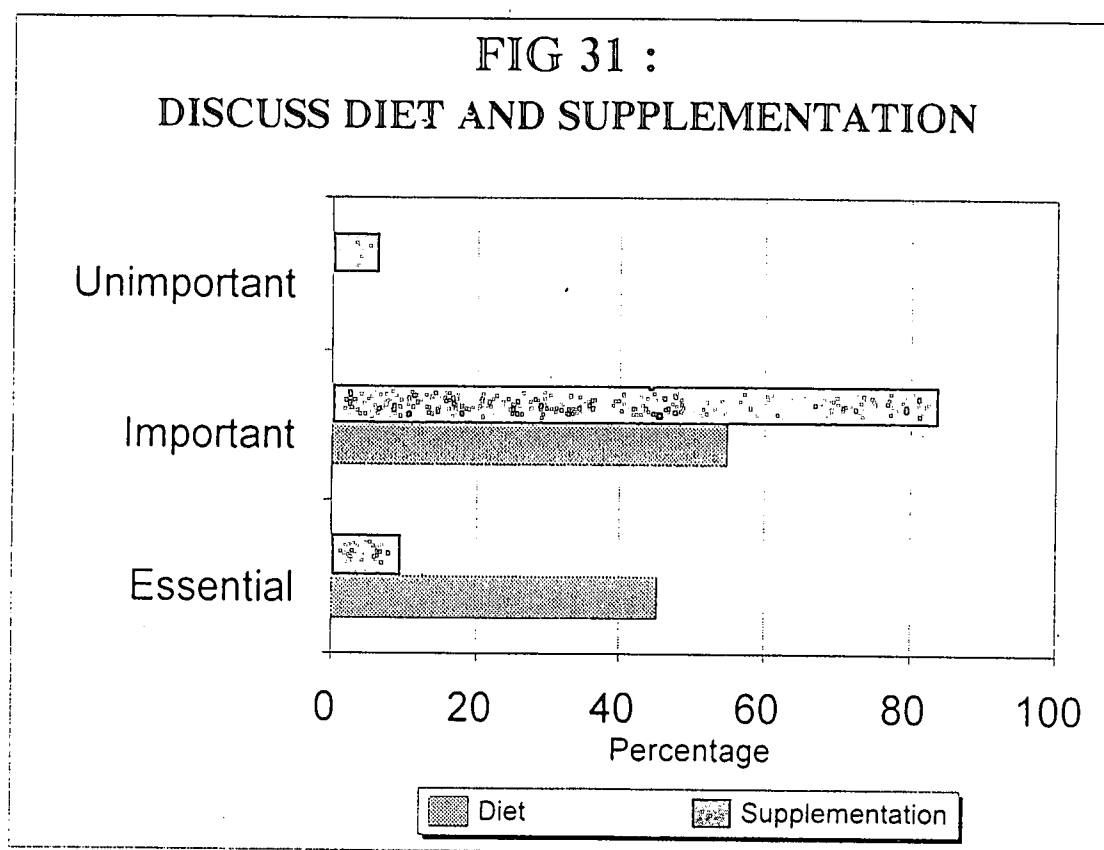
It could therefore be concluded that all of the practitioners felt that patients should relax at some stage each week.

4.3.3.6 Diet and Nutrition



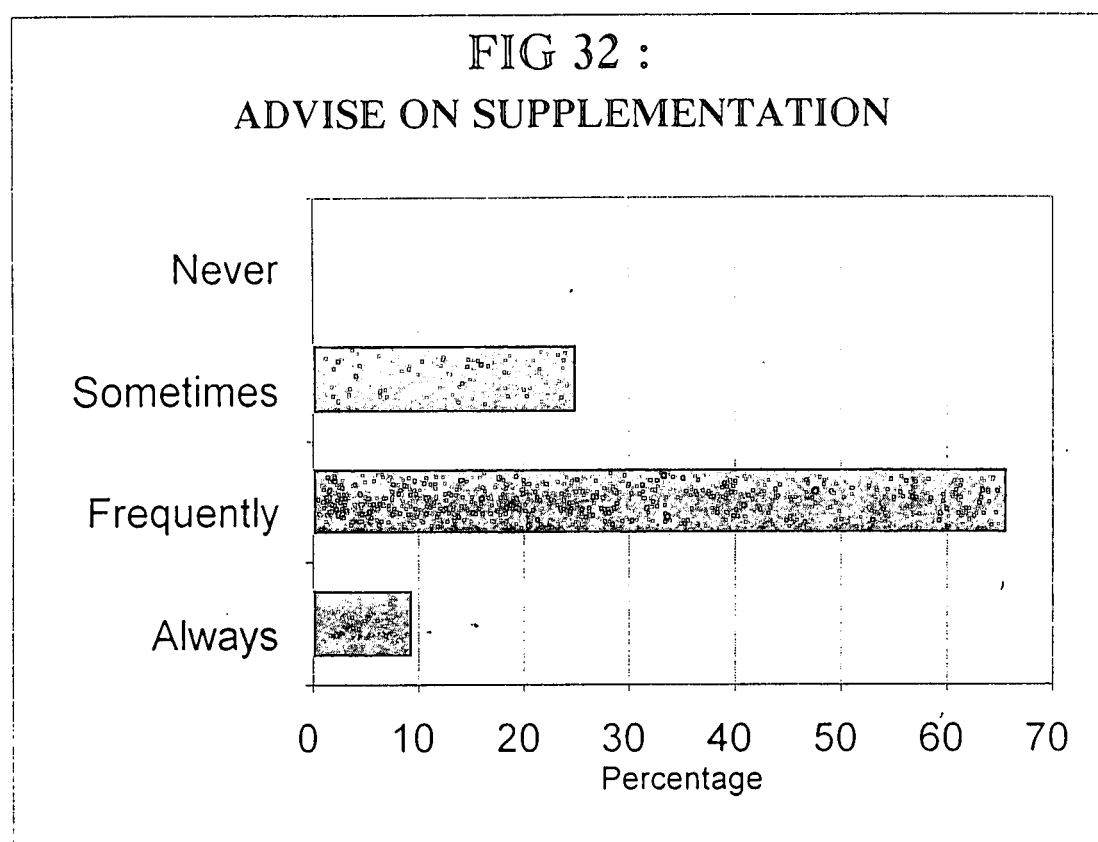
It was encouraging to note that no practitioner rated the influence of diet on health as unimportant. In actual fact, the majority (65.60 percent) rated it as essential. However, 6.46 percent of the practitioners did not respond to this question. It could be assumed that most the practitioners would discuss diet with their patients.

Figure 31 tabulates how important practitioners rated the discussion of diet and supplementation.



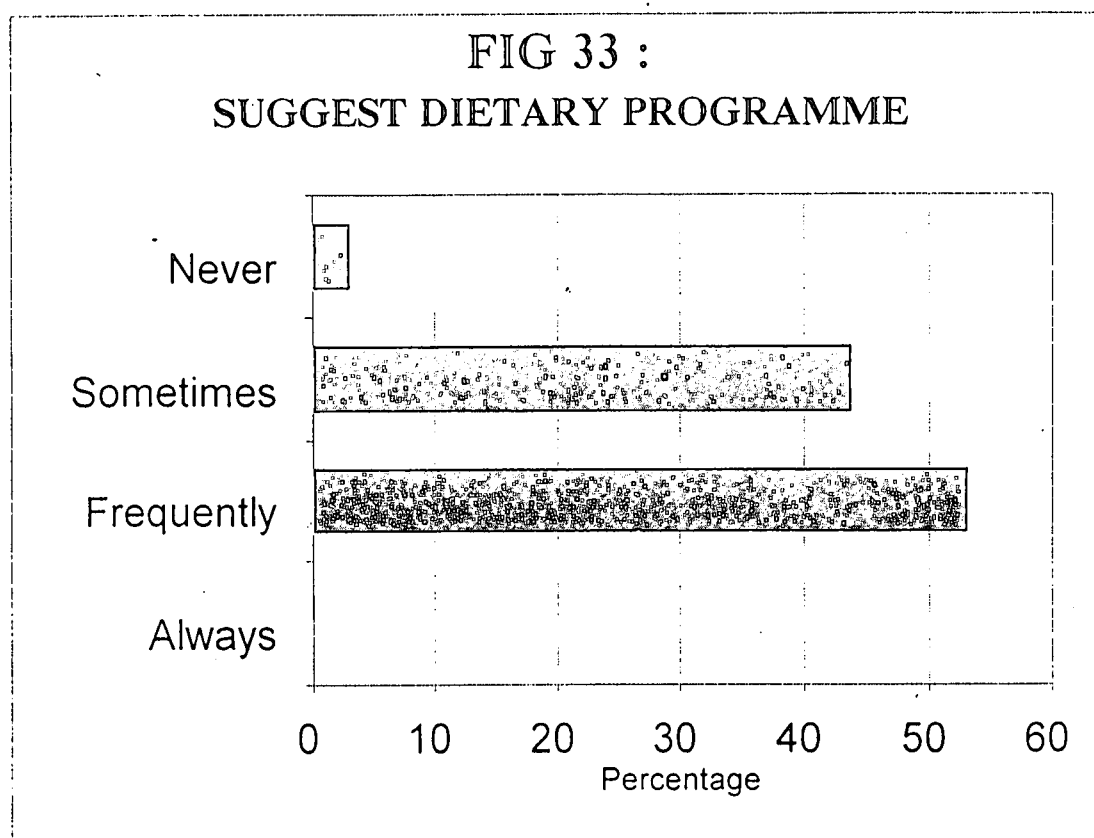
As expected, not one practitioner rated the discussion of diet as unimportant. However, 6.45 percent (two practitioners) rated the discussion of supplementation as unimportant. It could be assumed that these two practitioners believed a balanced diet to be sufficient in obtaining nutritional well-being, without the need for vitamin and mineral supplementation. Practitioners rated the discussion of diet more essential than that of supplementation.

Question 19 was used to establish the frequency with which practitioners advise patients on vitamin or mineral supplementation.



It must be remembered that two practitioners rated the discussion of supplementation as unimportant. However, the results from Figure 32 revealed that there was no-one who said that they never advised their patients on supplementation. Therefore, the assumption reached regarding these two practitioners does not hold ground, because, even though they rated the discussion of supplementation as unimportant, they indicated in Question 19 that they advised patients on supplementation. The majority of practitioners (65.63 percent) frequently advised their patients on vitamin or mineral supplementation.

In order to establish the frequency with which practitioners suggested specific dietary programmes to their patients, the results of Question 20 were assessed as follows:



Comparing the results of Figure 32 and Figure 33, it became obvious that practitioners more often gave patients advice on supplementation than on specific dietary programmes. However, Figure 31 revealed that practitioners rated the discussion of diet more essential than that of supplementation. It must therefore be assumed that practitioners perceived "specific dietary programmes" to mean something different to the "discussion of diet".

4.3.3.7 Smoking

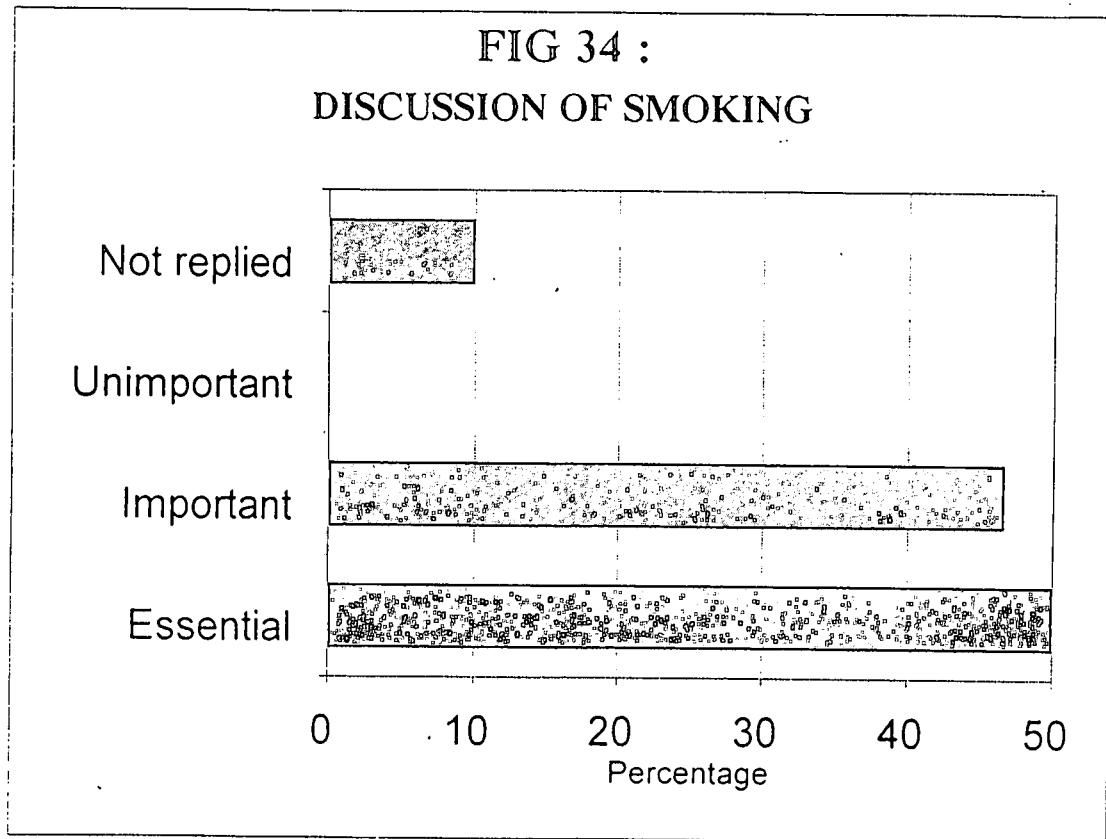
Twenty-eight of the practitioners (87.5 percent) said they were concerned about their patients' smoking habits. Four (12.5 percent) said that it did not concern them.

In a later question, eight practitioners (25 percent) said that they smoked, as opposed to the 24 (75 percent) who said that they did not smoke.

It was interesting to note that of the eight practitioners who smoked, only one (12.5 percent) said it did not concern him/her whether or not patients smoked. Of the 24 who did not smoke, three (12.5 percent) said it did not concern them whether or not their patients smoked.

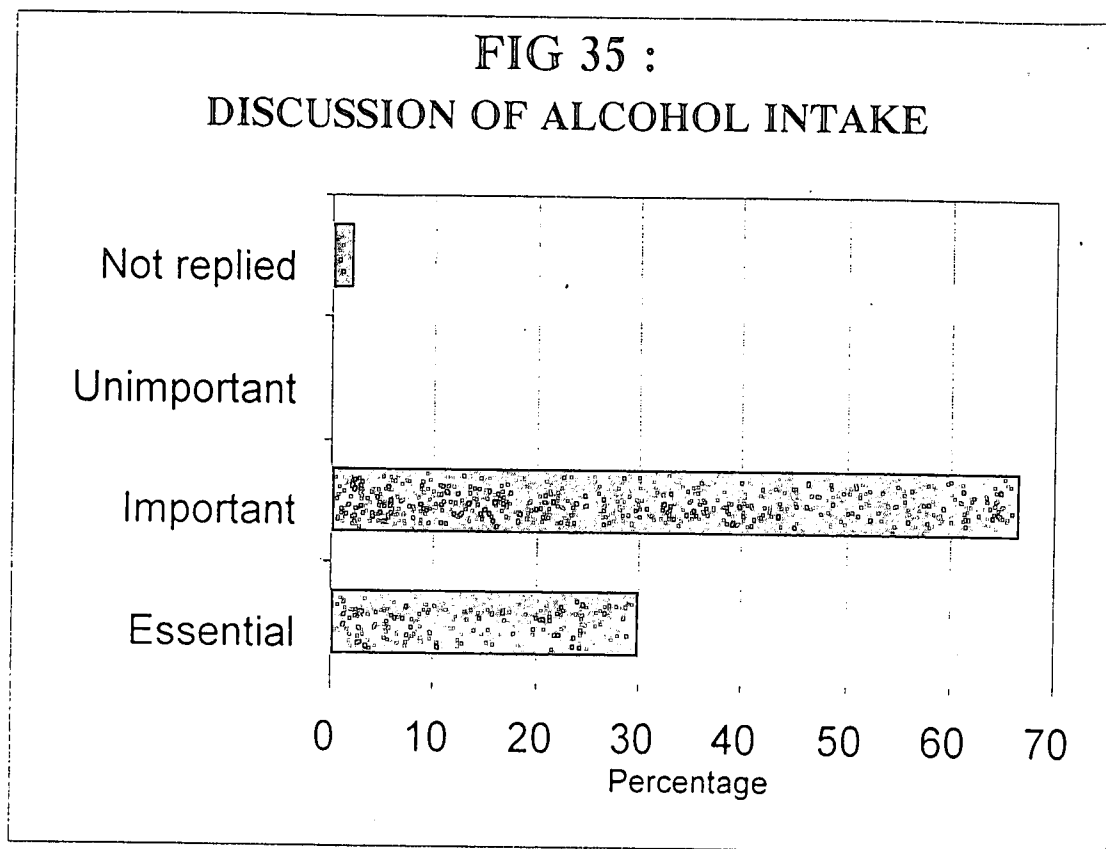
Therefore, 12.50 percent of both the smokers and non-smokers said it did not concern them whether or not their patients smoked. It did not seem that practitioners who smoked are any more, or less, concerned about their patients' smoking habits, than these who did not smoke.

Practitioners were asked to indicate how important they thought the discussion of smoking was. The results were tabulated in Figure 34.



The greater proportion felt that it was either essential or important, and three practitioners did not respond. There was not a single practitioner who felt that it was unimportant to discuss smoking with their patients, even though earlier, four practitioners said their patients' smoking habits did not concern them. Therefore it could be assumed that these practitioners would discuss smoking with their patients, whether or not their patients' smoking concerned them.

4.3.3.8 Alcohol Consumption



It would seem that the greater majority of practitioners were aware of the potentially harmful effect of alcohol abuse on their patients' well-being, and presumably that they were dealing with this subject in their patient management programmes.

4.3.3.9 Occupational Hazards

A total of 30 practitioners (93.75 percent) said that they did inquire about occupational hazards to which their patients may be exposed. Only two (6.25 percent) said that they did not.

Thirty practitioners (93.75 percent) answered that they did sometimes recommend a change in the patient's working environment, either to the patient or to the employer. Again, two practitioners (6.46 percent) said they had never made such recommendations.

In a different question, 23 practitioners (71.88 percent) said they did sometimes recommend a change in the patient's occupation. Eight practitioners (25 percent) said they had never recommended a change, and one practitioner did not reply. (See Table Thirteen)

TABLE THIRTEEN : RELATIONSHIP BETWEEN OCCUPATIONAL HAZARDS AND CHIROPRACTIC HEALTH CARE

Do you ever?	Yes	No
Inquire about possible occupational hazards	93.75%	60.25%
Suggest a change in patient's working environment	93.75%	6.25%
Suggest a change in patient's occupation	71.88%	25.00%

Cross-tabulation revealed that, of the two practitioners who said they had never recommended a change in the patient's working environment, one respondent did inquire about occupational hazards.

It could be argued that practitioners may not always feel the need to suggest a change in the patient's working environment, even though they have established that the patient is exposed to an occupational hazard. They might feel that in the current economical situation, such a change will place added stress on the patient. This may explain why one practitioner had never recommended a change in the working environment, even though this practitioner did inquire about occupational hazards.

4.3.3.10 Medication and Drug Use

Question Ten revealed that 19 practitioners (59.38 percent) never suggested medication as a form of stress management. However, two practitioners (6.25 percent) replied that, as a form of stress management, they often did, and three practitioners (9.38 percent) said they frequently did. The other eight (25 percent) said that they sometimes did. (See Table Ten)

It was interesting to note that in a drugless profession, such as chiropractic, a large number of the practitioners who participated in this study suggested medication to their patients as a form of stress management.

In another question, 12 practitioners (38.71 percent) rated it as essential to discuss medication with their patients, and 18 (62.10 percent) rated it as important. Two practitioners (6.46 percent) did not respond to this question and no-one rated it as unimportant.

In relation to the drug issue, Question 22 revealed that 15 practitioners (46.90 percent) felt it essential to discuss social drug use with their patients, and 14 ((43.75 percent) felt it to be important. No-one felt it to be an unimportant matter in patient management. However, three practitioners (9.68 percent) did not respond to this question.

**TABLE FOURTEEN : PERCEIVED IMPORTANCE OF DISCUSSING
MEDICATION AND DRUG USE WITH PATIENTS**

	Essential	Important	Unimportant
Medication	40.00%	56.67%	0.00%
Social drug use	50.00%	46.67%	0.00%

These results revealed that the majority of practitioners would discuss both medication and drug use with their patients.

4.3.4 Results of Section Two

4.3.4.1 The practice of wellness in chiropractic health care in South Africa

Questions Two to Twenty-two of the practitioner questionnaire dealt with various issues pertaining to holistic health care, as defined in section 4.1. An interpretation of this data should result in a better understanding of the practitioners' perception of holism and their practise of wellness.

In Question 22 practitioners were asked to rate how important they felt it was to discuss with their patients the various listed issues related to holistic health care. Figure 36 illustrates these results.

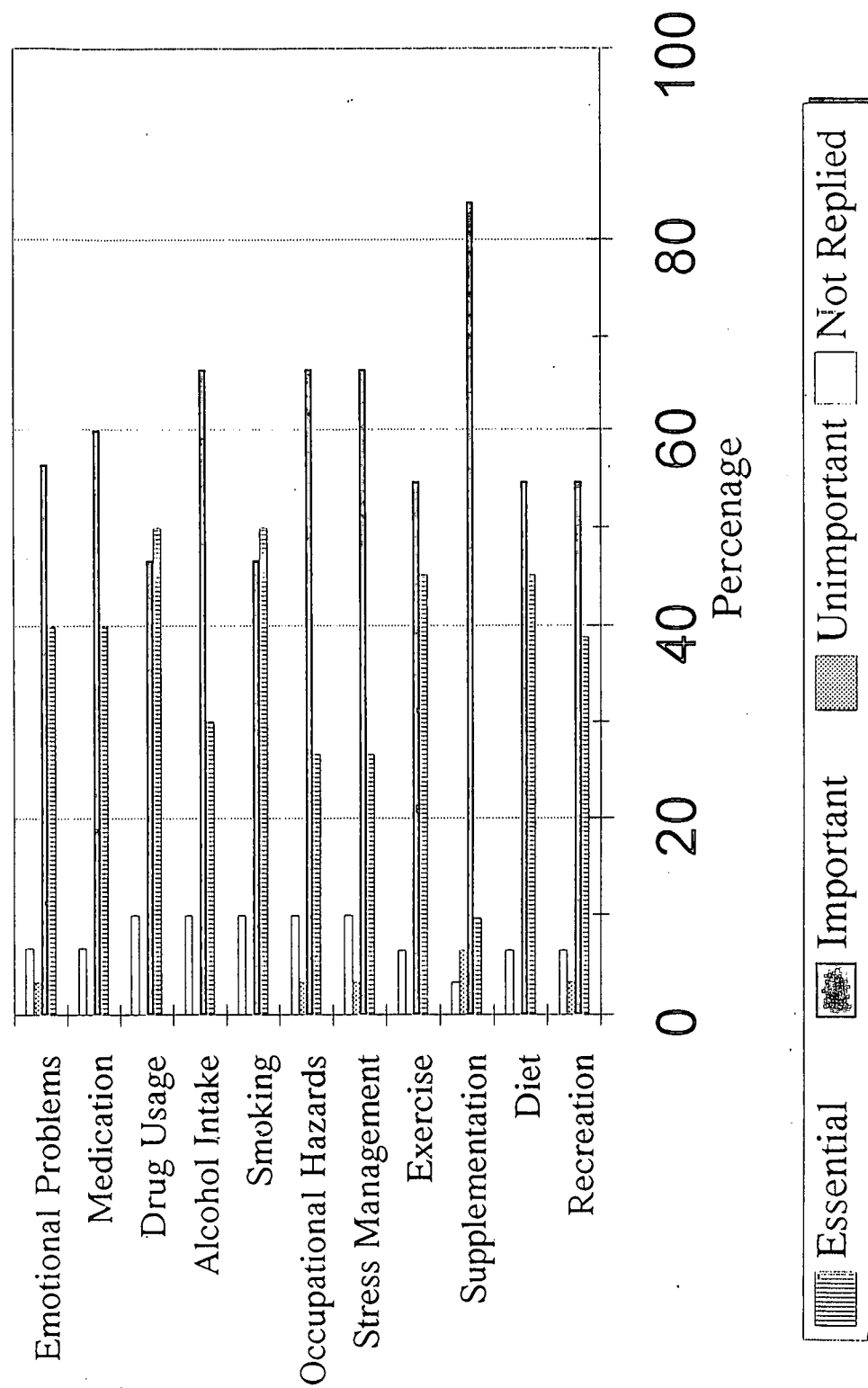
According to these results the participating practitioners are all aware of the importance of a holistic approach to chiropractic health care.

4.3.4.2 The scope of chiropractic in South African health care

Practitioners were asked to what degree they believe chiropractors should be musculo-skeletal specialists. In reply, 26 (81.30 percent) said it was essential, six (18.80 percent) replied that chiropractors were musculo-skeletal specialists to some degree only, and no-one replied "not at all."

According to the added note of one chiropractor, it was observed that the question should have been "to what degree do you believe chiropractors should be neuro-musculo-skeletal specialists" and that this question would have resulted in him replying "essential" instead of "to some degree."

FIG 36 :
THE PRACTISE OF WELLNESS



Question 24 concerned practitioners' perception of their patients' co-operation in management programmes. Practitioners were asked whether they believed that patients generally followed the advice given to them. Of the 32 respondents, 17 (53.10 percent) replied that they believed patients frequently followed their instructions; the other 15 (46.90 percent) said they believed patients sometimes did.

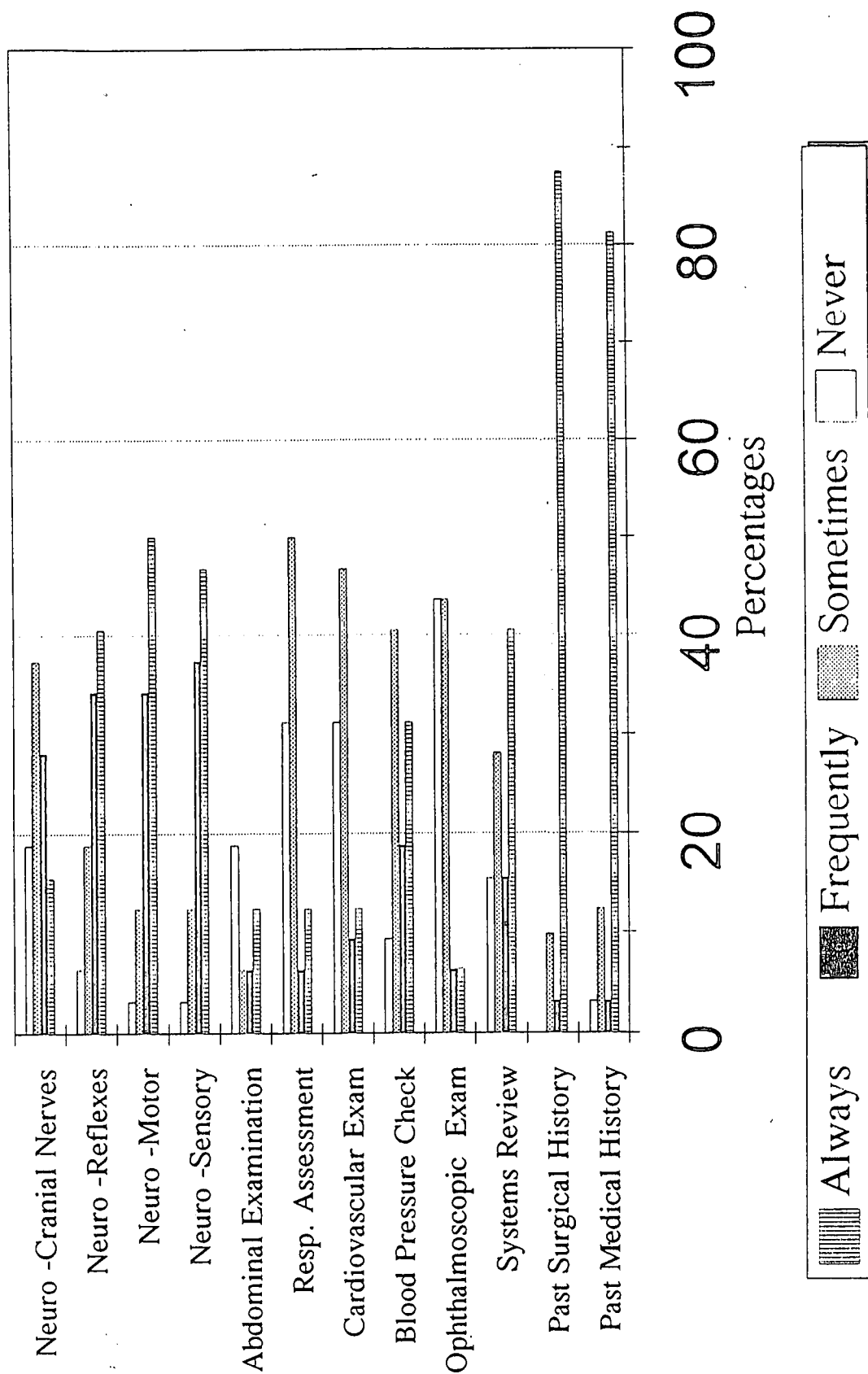
Practitioners were also asked whether they believed it to be worthwhile giving their patients specific instructions regarding their condition. All 32 practitioners replied "yes" to this question. They therefore perceived advice or instructions to their patients, as an essential part of chiropractic health care.

4.3.4.3 Case history and physical examination procedures followed by South African chiropractors

Question 26 required an indication of how often an initial case history and examination included various patient historical and physical examination procedures. The results are tabulated in Figure 37. (For the sake of brevity the data generated in this section has been excluded in the text, but can be viewed in Appendix 7.8).

It would seem that the majority of practitioners rated the neurological examination as important in the evaluation of a new patient. An assessment of individual neurological components revealed that the majority of practitioners frequently included motor, sensory and reflex examinations in an initial

FIG 37 : HISTORICAL AND PHYSICAL EXAMINATION PROCEDURES



consultation. Although quite a large number of practitioners also include the cranial nerve examination (26 practitioners), it seems to be on a less frequent basis than the other three components.

These results confirmed chiropractic's concern with the neuro-musculo-skeletal components of the body as a whole. However, the body's innervation cannot be ignored in favour of the other two components alone, or vice versa.

4.3.4.4 Chiropractic patient diagnosis

Question 27 asked practitioners whether patient management programmes entailed a diagnosis that excluded "subluxation" and/or "fixation."

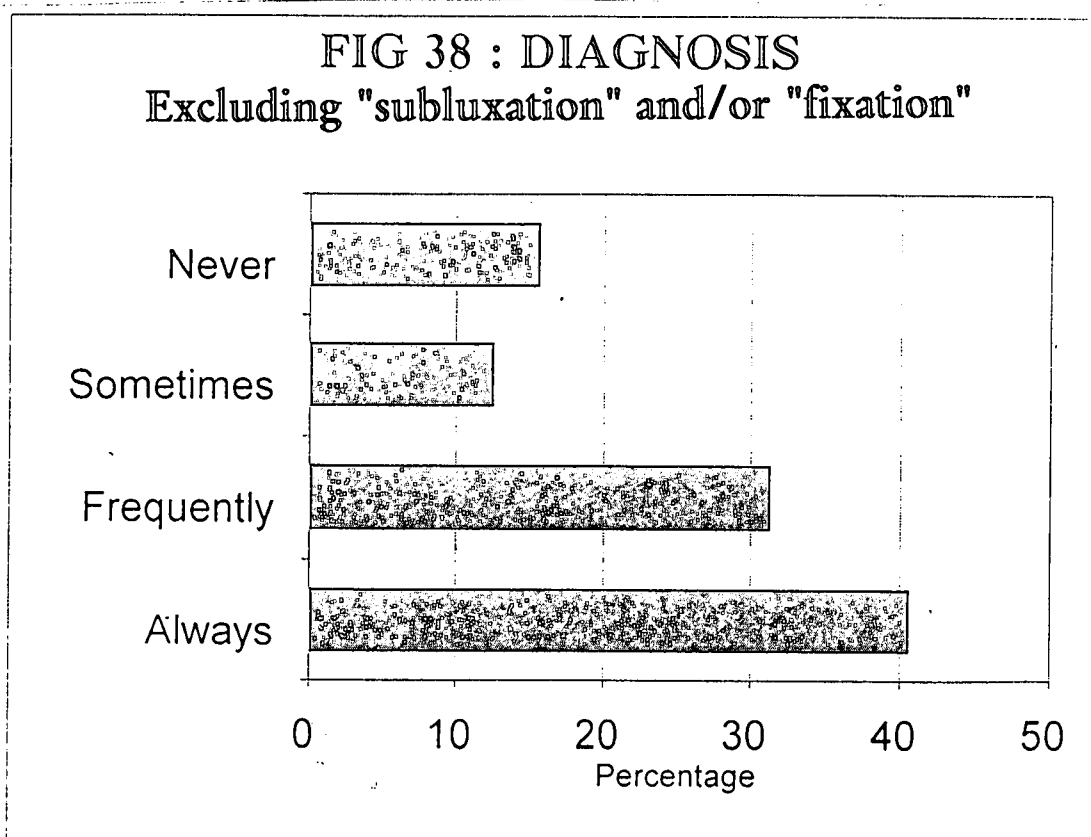
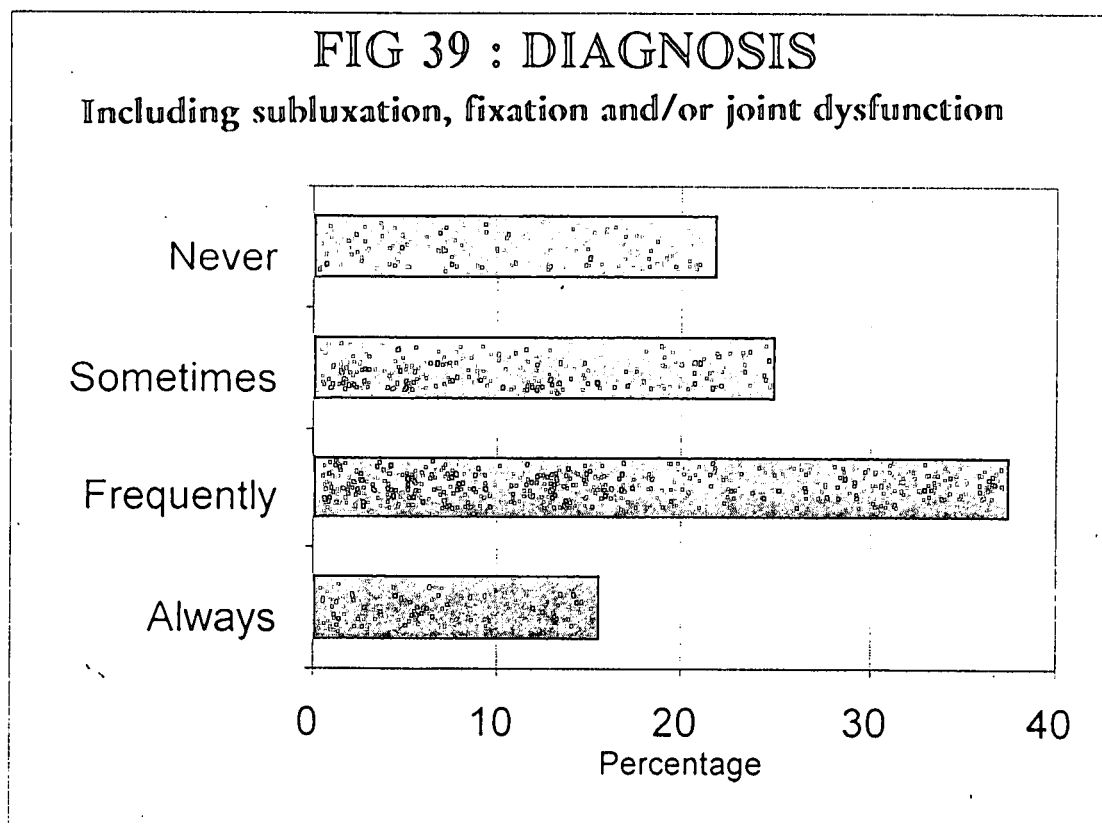


Figure 38 indicated that 40.60 percent always included a diagnosis, but excluded a consideration of subluxation and/or fixation. A further 31.30 percent frequently did, and 12.50 percent sometimes did. Only 15.60 percent replied that their management programmes never offered a diagnosis which would excluded these terms.

Question 28 asked whether their diagnosis consisted of only the following: "subluxation", "fixation" or "joint dysfunction". (See Figure 39.)



Here 15.60 percent replied that their diagnoses always included these terms, 37.50 percent said it frequently did, and 25 percent said it sometimes did. The other 21.90 percent replied that their diagnoses never included any of these terms.

Cross-tabulation of Questions 27 and 28 revealed that of the 21.90 percent who replied that their diagnosis never consisted of "subluxation", "fixation" or "joint dysfunction", 85.70 percent replied that they always included a diagnosis in their patient management, that excluded "subluxation" and/or "fixation".

However, of the 15.60 percent who said that their diagnosis always consisted of "subluxation", "fixation" or "joint dysfunction", 60 percent also replied that their diagnosis always or frequently excluded "subluxation" and/or "fixation."

It could therefore be concluded that some practitioners may use "subluxation", "fixation" and/or "joint dysfunction" as a diagnosis in some cases. However, it would seem that those practitioners whose diagnoses never consisted of "subluxation", "fixation" or "joint dysfunction" almost always included a diagnosis other than these, in their patient management programmes.

This latter group of practitioners are following similar diagnostic criteria to those currently taught at the Technikon Natal.

4.3.4.5 The various chiropractic techniques utilized by South African chiropractors

Questions 29 and 30 were included in order to establish which techniques are most frequently employed by South African practitioners. Question 29 covered the broad categories and question 30 listed different techniques relevant to each of these categories.

Five categories were listed in Question 29, and practitioners were asked to indicate how often they made use of each of these. (See Figure 40.)

The results revealed that the technique categories most frequently used by the practitioners who responded to the questionnaire were adjustive/manipulative and soft-tissue techniques. These were followed by traction and reflex techniques. Electrotherapeutic techniques were the least frequently used by these practitioners. (See Appendix 7.9 for the processed data relevant to this section.)

Question 30 listed specific techniques related to the categories in Question 29. These results will be discussed under the various category headings. It must be remembered that practitioners were not limited to the selection of one technique per category. They were however, asked to indicate all the different techniques used by them.

a) Adjustive/Manipulative Techniques

Only 29 of the 32 practitioners answered this section. Seven techniques were listed. Table Fifteen lists these in order of preference.

FIG 40 :
BROAD TECHNIQUE CATEGORIES

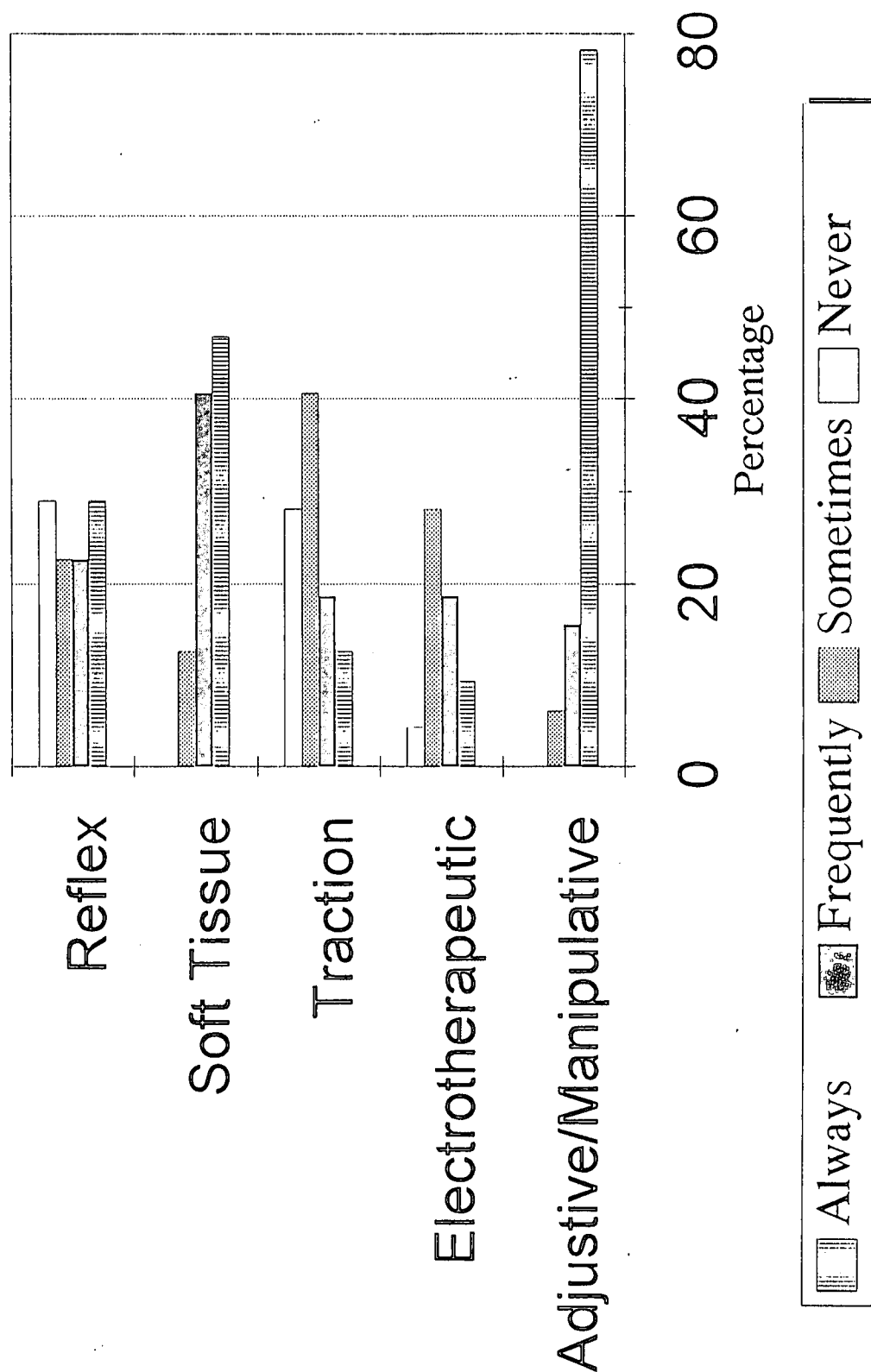


TABLE FIFTEEN : ADJUSTIVE/MANIPULATIVE TECHNIQUES

Technique	Percentage of practitioners using this technique	Percentage of practitioners not using this technique
Diversified	86.20%	13.80%
Gonstead	58.60%	41.40%
Thompson Terminal Point	44.80%	55.20%
SOT-Blocks	37.90%	62.10%
Toggle-Recoil	24.10%	75.90%
Pierce-Stillwagon	13.80%	86.20%
Grostick	3.45%	96.55%

Diversified was the most common technique, with 86.2 percent of the practitioners making use of it. Grostick and Pierce-Stillwagon were the least commonly used by the practitioners who participated in this study.

b) Soft-Tissue Techniques

Eight techniques were listed in this category, and again only 29 of the 32 practitioners completed this section.

TABLE SIXTEEN : SOFT-TISSUE TECHNIQUES

Technique	Percentage of practitioners using this technique	Percentage of practitioners not using this technique
Massage	58.60%	41.40%
Ice/Heat Packs	51.70%	48.30%
Vibro-Massage	48.70%	51.70%
Nimmo	44.80%	55.20%
Myofascial Trigger Point Needling	44.80%	55.20%
Spray and Stretch	17.20%	82.80%
Acupuncture	13.80%	86.20%
Ischaemic Compression	10.30%	89.70%

Unlike the adjustive/manipulative techniques, the soft-tissue techniques are less commonly used by the majority of the practitioners. As depicted by Table Sixteen, Massage was the most commonly used soft-tissue technique. It was used by 58.6 percent of the practitioners, as opposed to the 86.2 percent who used Diversified. It was interesting to note that Spray and Stretch, Acupuncture and Ischaemic Compression were the least popular of the soft-tissue techniques, and were about as commonly used as the Pierce- Stillwagon technique, but more commonly used than the Grostic Technique.

c) Traction Techniques

Six techniques were listed in this category, and again only 29 of the 32 practitioners completed this section. (See Table Seventeen.)

Again, the traction techniques were less popular when compared to both soft-tissue and adjustive techniques. The most commonly used traction technique, cervical spine traction, was only used by 41.4 percent of the practitioners. The rest were as common as the least commonly practised techniques, in the categories discussed thus far.

TABLE SEVENTEEN : TRACTION TECHNIQUES

Technique	Percentage of practitioners using this technique	Percentage of practitioners not using this technique
Cervical Spine Traction	41.40%	58.60%
Flexion/Distracton	20.70%	79.30%
Inverted Traction	17.20%	82.80%
Cox Traction	10.30%	89.70%
Mc Manis Traction	3.45%	96.55%
Hill Table	0.00%	100.00%

d) Reflex Techniques

Seven techniques were listed in this category, and again only 29 of the 32 practitioners, completed this section.

TABLE SEVENTEEN: TRACTION TECHNIQUES

Technique	Percentage of practitioners using this technique	Percentage of practitioners not using this technique
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Mc Manis Traction	3.45%	96.55%
Hill Table	0.00%	100.00%

d) Reflex Techniques

Seven techniques were listed in this category, and again only 29 of the 32 practitioners, completed this section.

TABLE EIGHTEEN : REFLEX TECHNIQUES

Technique	Percentage of practitioners using this technique	Percentage of practitioners not using this technique
Applied Kinesiology	37.90%	62.10%
S.O.T	31.00%	69.00%
Activator	27.60%	72.40%
B.E.S.T	27.60%	72.40%
Logan-Basic	10.30%	89.70%
Reflexology	6.90%	93.10%
Biofeedback	3.45%	96.55%

The first four techniques were most commonly used amongst the practitioners, and were also used more commonly than the majority of flexion techniques.

e) Electrotherapeutic Techniques

Seven techniques were listed and again, only 29 of the 32 practitioners completed this section.

TABLE NINETEEN: ELECTROTHERAPEUTIC TECHNIQUES

Technique	Percentage of practitioners using this technique	Percentage of practitioners not using this technique
Ultra Sound	41.40%	58.60%
Infra Red	17.20%	82.80%
Diathermy	13.80%	86.20%
I.F.C	13.80%	86.20%
Laser	10.30%	89.70%
TENS	6.90%	93.10%
Low Volt	0.00%	100.00%

Ultra Sound, the most commonly used electrotherapeutic technique, is as commonly used as Cervical Spine Traction, and slightly less commonly used than Applied Kinesiology.

4.3.5 Additional Practitioner Data

It is also necessary to evaluate the practitioners, in order to establish whether they were representative of the chiropractic practitioner population as a whole, or whether they only represented a specific section of the practitioner population.

The responses revealed a wide spectrum in reply to the year of graduation, ranging between 1939 and 1989. It would therefore seem fair to say that as far as graduation and years in practice are concerned, the practitioner group is representative of the total practitioner population in South Africa.

Table Twenty displays the various colleges attended by the participating practitioners.

TABLE TWENTY : COLLEGES ATTENDED BY PRACTITIONERS

College attended	Number of graduates
Palmer	12
Lincoln	6
National	6
Anglo-European	4
Canadian Memorial	1
Cleveland	1
Phillip Institute	1
Sherman	1

Graduates from Palmer College represented almost 50 percent of the practitioner group. Because all colleges do not follow the same educational model, the influence of the Palmer educational model may be of considerable significance in the data obtained. However, as chiropractic developed during the past century, so the educational models followed at all colleges have been adapted, changed or modified. Therefore, I am of the opinion that the choice of Palmer holds no significance in so far as the type of practitioner response generated. This is purely an assumption and it may be worth evaluating and comparing attitudes, techniques and patient management programmes between practitioners in terms of their alma maters. However, such an evaluation goes beyond the scope of this study.

TABLE TWENTY-ONE : LOCATION OF PRACTITIONERS' PRACTICES

	Practice Location
Town	21.90%
City	78.10%

TABLE TWENTY-TWO : POPULATION SIZE OF PRACTITIONERS' LOCATION

Population size	Percentage of practitioners
Less than 50 000	12.50%
50 000 - 100 000	9.38%
100 000 - 1 million	50.00%
More than 1 million	25.00%
Practitioners not replied	3.13%

The results also revealed that many practitioners (78.10 percent) are practising in cities and that a large number of these cities have a population of between 100 000 and 1 000 000. It is a commonly accepted fact that compared to rural people, city dwellers live at a much faster pace, and are more rushed for time. This in turn may affect their value systems and may influence the way in which

urban practitioners think and practice. The perception and expression of holism in patient care may differ radically between city and rural practitioners. However, it is not possible to say whether the distribution of city and town practitioners of this sample group is representative of the total practitioner population, unless the total population be known.

As stated previously in the discussion of the different colleges attended, it may be interesting to note the difference in attitudes and practice management programmes between rural and urban practitioners. However, such an endeavour is beyond the scope of this study and therefore it will only be noted that the majority of practitioners are practising in cities.

TABLE TWENTY-THREE : TIME SPENT WITH PATIENTS DURING THE INITIAL AND SUBSEQUENT VISITS

Time frame	Initial Visit	Subsequent Visit
1 - 10 minutes	0.00%	15.63%
10 - 20 minutes	25.00%	65.63%
20 - 30 minutes	56.20%	12.50%
More than 30 minutes	18.80%	3.13%
Not replied	0.00%	3.13%

It is regrettable to note how few practitioners really spent time with their patients. Only four practitioners (12.50 percent) spent more than 20 minutes with them during follow-up consultations, and only one practitioner (3.13 percent) spend more that 30 minutes with his/her patients. It seems strange that chiropractors could claim to differ from medical or orthodox practitioners, due to the fact that they have a holistic approach to health care that takes the whole person and not only the disease process into account, and then spend such a short time with their patients that it is almost impossible for them to cover the disease process in full, let alone the whole person.

4.4 COMPARISON BETWEEN PATIENT AND PRACTITIONER QUESTIONNAIRE RESULTS

4.4.1 INTRODUCTION

The patient's and practitioner's perception of holism and wellness in chiropractic health care was assessed in sections 4.2 and 4.3 respectively. In this section, the patient's experience of the practise of wellness will be compared to the practitioner's practise of wellness.

It must be remembered that 218 patients and 32 practitioners responded to their respective questionnaires. This reflects an average response ratio of approximately seven patients to one practitioner. It could therefore be assumed that the response of seven patients reflects the practice methods of one practitioner.

The results of both questionnaires will once again be compared in terms of the selected issues related to holism, as specified in this study. (See section 4.1)

4.4.1.1 Exercise

Of the 218 patients who responded to this study, 31 (14.2 percent) replied that their practitioners never discussed exercise with them, although not one practitioner responded that they felt it is unimportant to discuss exercise with their patients. Also, all of the practitioners who responded to the questionnaire said that they did suggest specific exercise programmes to some of their patients.

It could therefore be concluded that although all the practitioners who participated in this study rated the discussion of exercise with their patients as essential or important, there were at least four whose practice implies otherwise. However, this irregularity may also be as a result of poor memory on the part of the of patients.

4.4.1.2 Stress Management

Only one practitioner felt that it was unimportant to discuss stress management with his/her patients, and four practitioners said they have never discussed stress management with their patients. However, the patients' responses revealed that 101 (46.3 percent) of the 218 participating patients, said that their practitioners never discussed stress management with them. Therefore, assuming reliability of patient memory, at least fourteen of the participating practitioners, did not discuss stress management with all their patients.

If the four practitioners who admitted to never discussing stress management with their patients are taken into consideration, these results imply that at least ten practitioners who rated stress management as essential or important in patient management, did not discuss stress management with all of their patients.

4.4.1.3 Religion

The patient questionnaire revealed that patients rated discussion of their spiritual well-being as the least important, compared to discussion of their physical, mental, and emotional well-being. It also revealed that 60.10 percent of the patients said that it was unimportant for their chiropractor to discuss spiritual well-being with them. The practitioner questionnaire results revealed that 17 of the 32 practitioners (53.13 percent) said that they never discussed prayer as a form of stress management with their patients, and 16 (50 percent) said that they never suggested meditation as a form of stress management to their patients. It could therefore be concluded that prayer and meditation did not feature in chiropractic health care, and that according to many patients the discussion of religion does not form part of chiropractic health care in general.

4.4.1.4 Emotional Well-Being

Emotional well-being was included in four separate sections in the patient questionnaire. However, in each of these sections it was used to determine a different set of data. For example, in sub-section 4.4.1.3 it forms part of establishing the degree to which patients were aware of the interrelatedness of the holistic concept in health care, and in section 4.2.3 it was used to determine how the patients perceived religion to influence their emotional lives.

The patient questionnaire revealed that 131 (60.10 percent) never had their practitioners discuss emotional problems with them. However, the practitioner questionnaire revealed that only one practitioner said that it was unimportant to discuss emotional problems with his/her patients.

Therefore, at least 19 of the 31 practitioners who said that it was either essential or important to discuss emotional well-being, probably were not doing this in their practices.

4.4.1.5 Diet and Nutrition

All the practitioners felt that it was either essential or important to discuss diet with their patients, and only two practitioners (6.45 percent) felt that it was unimportant to discuss supplementation with their patients. However, the patient questionnaire revealed that 89 patients (40.80 percent) never had their practitioners discuss diet with them, and 112 patients (51.40 percent) replied that their practitioners never discussed supplementation. Taking into account that an average of seven patients responded for every participating practitioner, it could be assumed that the above 89 patients represent at least 13 practitioners, and the 112 patients represent at least 16 practitioners. Therefore, although no practitioner felt that the discussion of diet was unimportant, at least 13 of the 32 practitioners did not discuss diet with their patients. Also, only two practitioners felt it is unimportant to discuss supplementation with their patients, but according to the patients, 16 probably never discussed supplementation.

It could therefore be concluded that not all practitioners are practising according to their convictions in this respect.

4.4.1.6 Smoking

This was one of the areas where practitioners' and patients' responses differed most. There were 31 practitioners who said that it was either essential or important to discuss smoking with their patients and one practitioner did not reply to this question. However, 183 patients (83.94 percent) said their practitioners never discussed smoking with them.

This would imply that, assuming reliability of patient memory, approximately 26 participating practitioners who responded that discussing smoking was either essential or important were neglecting to do just that in their practices.

However, it must be remembered that 20.20 percent of the patients indicated that they smoke. Therefore by implication 79.80 percent do not smoke. In light of this it could be assumed that of the 83.94 percent who indicated that their practitioners never discussed smoking with them, the greater majority are non-smokers. This could be a reason why practitioners neglected discussing smoking with all of their patients.

4.4.1.7 Alcohol Consumption

Not one practitioner said that it was unimportant to discuss alcohol consumption. However, 183 patients (83.94 percent) replied that their practitioners never discussed alcohol consumption. This implies that at least 26 of the 32 participating practitioners who said that it was either essential or important to discuss alcohol consumption with their patients, probably did not implement their belief.

4.4.1.8 Occupational Hazards

Only two of the participating practitioners replied that they did not inquire about possible occupational hazards. However, 143 of the 218 patients (65.60 percent) replied that their practitioners never discussed occupational hazards with them. Of this group, 31 patients (21.7 percent) admitted to being exposed to occupational hazards.

Therefore at least 20 of the 32 practitioners never discussed occupational hazards. When the two practitioners who admitted to never inquiring about occupational hazards were taken into account, these results reflected that there may have been 18 of the 30 practitioners who said that it was either essential or important to discuss occupational hazards with their patients, who were not doing this in their practices.

4.4.1.9 Medication and Drug Use

Not one practitioner said that it was unimportant to discuss either medication or drug use with patients. However, 113 of the 218 participating patients (51.83 percent) said that their practitioners never discussed medication with them, and 205 patients (94.04 percent) said their practitioners never discussed drug use with them.

There are obvious irregularities in these results that indicate that at least 16 practitioners did not discuss medication and at least 29 practitioners did not discuss drug use despite the fact that they all felt it was either "essential" or "important" to discuss these matters. In light of the fact that 40.63

percent of practitioners suggested medication to their patients as a form of stress management (See Table Ten), it was disturbing to note that very few practitioners seemed to actually enquire about their patients' drug and medicine usage.

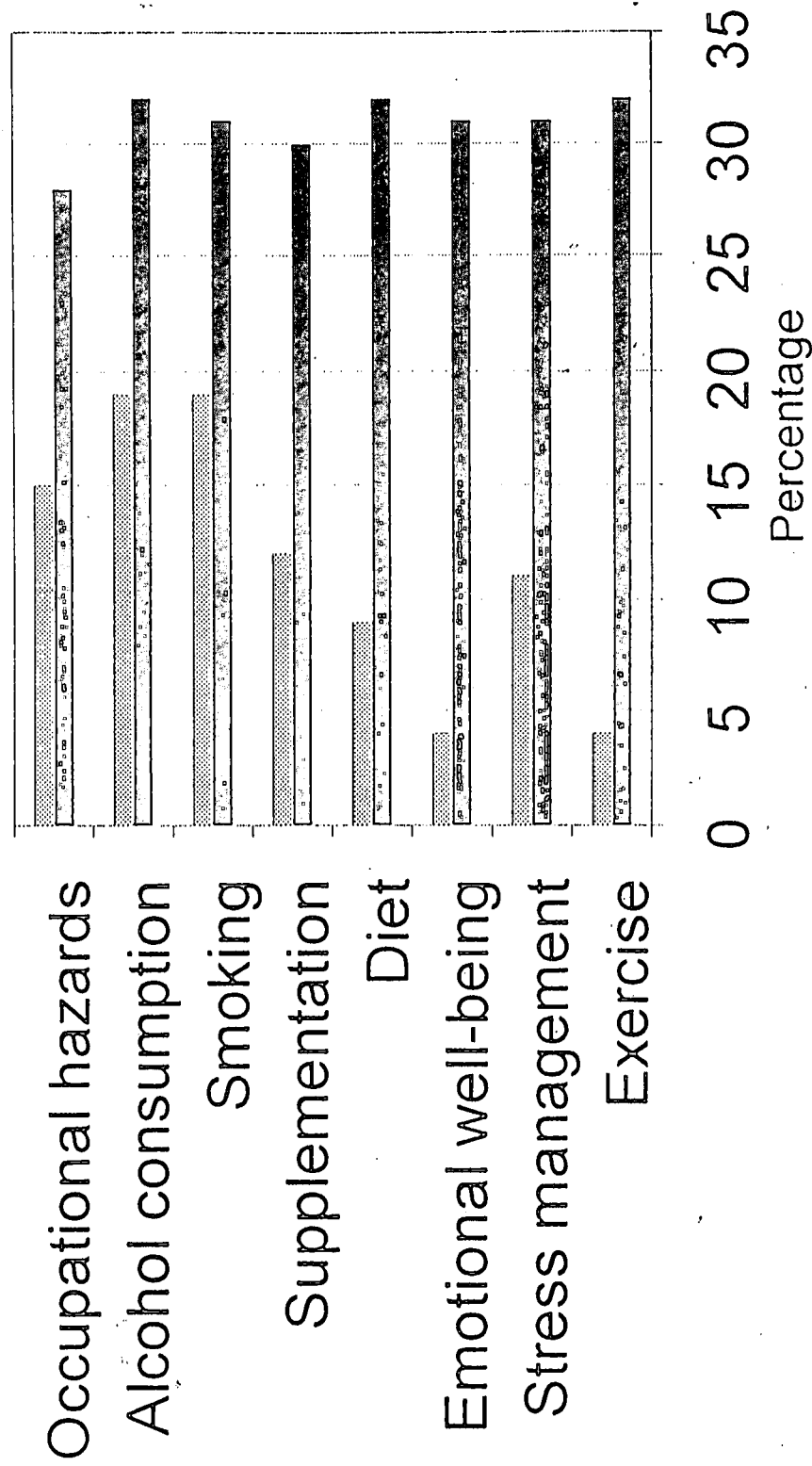
4.4.1.10 Concluding Remarks



The information generated by the statistical evaluation of the questionnaire results shows inconsistencies between the practitioners' perception of the holistic concept and wellness practices and that which patients' had experienced of a holistic approach (or wellness) in their chiropractic management. (See Figure 41.)

At the outset of this study it was said that a holistic approach to health care is one that is aware of the continual interaction between a patient's physical, mental, emotional, spiritual and social environment.

It must be stressed that if you have an holistic approach to health care, you will be practising 'wellness'. Therefore, practitioners practising wellness will be aware of the influence of the environment on their patients' health, and also that patients can act upon their environments and modify it. By implication holistic treatment will include modification of patients' environments, as well as their physical, mental, emotional, chemical and spiritual spheres, because all these components are inter-related and inter-dependent in determining the patients' state of well-being.

FIG 41: Comparison between patients' experience of wellness practice and practitioners' view of wellness practice



 Important to discuss
  Not discussed

An important component in the holistic approach is that patients need to be aware of their role in the healing process. Patients must be made aware of the fact that the key concept in healing is balance between the mind, body, spirit and environment, and that it is a natural tendency for all living organisms to return to a dynamic state of balance. It must be stressed that their bodies possess the ability to heal themselves, but that healing is influenced by their psychological and spiritual state, their health habits and attitudes.

In the results discussed in Section 4.2 assessed the patients' awareness of the concept of holism in their personal lives. Their answers indicated that they were aware that physical, mental, spiritual, emotional and environmental factors can have an affect on personal well-being. It also revealed that they were aware of this despite the fact that some practitioners did not employ a wellness-based practice. Thus, it could be concluded that most patients were aware of a holistic approach to health care even before they received chiropractic treatment.

It may be assumed that the reason these patients consulted their practitioners was that they perceived chiropractic to be an 'alternative' to allopathic medicine. However, there may be various other reasons why the patient groups sought chiropractic care. Personal referral from a family member or a friend, or the need for symptomatic relief are just a few of these possibilities. The possibility also exists that some patients sought chiropractic care only as a last resort for a particular problem after various other health fields could not succeed in improving their health status.

The results from Section 4.3 revealed that South African practitioners were aware of all the components in health as covered by the questionnaires, but that they concentrated on the physical (body) component in their patient management programmes.

However, the fact that practitioners did not discuss the interdependence of the mind, spirit, emotions and environment in attaining health, may reflect a degree of indifference on the part of the practitioner. It could be argued that, if practitioners believed a balance between these aspects of life are relevant to the well-being of their patients (as their responses indicated), and subsequently failed to discuss them with the majority of their patients, they should be encouraged to take note of the responsibility of being a "teacher", as their title "doctor" implies they should be.

It must be stressed once more, that patients also have a responsibility towards their own well-being, and that according to the holistic approach, patients need to take personal responsibility for their health or lack thereof. This would imply that those patients whose practitioners have never discussed some of the health aspects with them are a) not aware of the importance of these factors in their own health b) rate them as unimportant in their own health, or c) not aware of their own responsibility with regards to staying healthy.

Which-ever the case may be, it should be the responsibility of practitioners, chiropractic associations, other health care professions, educational institutions, as well as the department of health to make the public aware of the importance of holism in health and the active role they themselves can play in 'getting healthy' and 'keeping healthy'.

It was previously noted that practitioners concentrated on the physical component in their patient management programmes. However, the questionnaires were also aimed at investigating the spiritual component in chiropractic health care. Given the complexity of these questions and its unsatisfactory formulation, it is nevertheless still exciting to note the large percentage of patients who were of the opinion that religion had an influence on their health. It is the hope of this researcher that all patients and practitioners become aware of the creative role religion may play in health and well-being.

Overall, in evaluating the questionnaire responses, it must be remembered that the total number of patients and practitioners who responded, is probably too small to be representative of the chiropractic patient or practitioner population in South Africa.

CHAPTER FIVE : CONCLUSIONS AND RECOMMENDATIONS

5.1 INTRODUCTION

In the initial chapter, three hypotheses were stated. The first one, that questionnaire results will reveal that patients received holistic treatment and that they are aware of holism in their personal lives, proved to be partially correct. The patients were in fact aware of holism in their personal lives, and some of them did receive holistic treatment from their practitioners.

The second hypothesis, that the questionnaire results will reveal that practitioners employ a holistic approach in their management programmes, was also partially true. Practitioners only employed a holistic approach in some areas of their management programmes, and not all practitioners did so equally.

The third and last hypothesis, which also formed the crux of the study, that the patients' experience of holism will correspond with the holistic approach offered by practitioners, proved not to be fully correct. There were inconsistencies between the patients' experience of wellness and the holistic approach offered by their practitioners.

It must be mentioned that no other study of this nature could be found, therefore these results can be used to formulate guiding principles in research methodology for future studies of a similar nature. Results of such studies may in turn enable the researcher to make more conclusive claims and observations relevant to chiropractic health care in South Africa. This study may also have implications for chiropractic

educational programmes. Such programmes should be evaluated in terms of the recommendations and suggestions in the final chapter, in order to establish the degree to which students are being made aware of the importance of a holistic approach to chiropractic health care.

The aim of this chapter is two-fold, and it will therefore be presented in two sections. The first section consists of guidelines regarding the research methodology which may be used in future studies of a similar nature. The second section is based on various conclusions and assumptions relevant to chiropractic health care, and recommendations flowing from these.

5.2 GUIDING PRINCIPLES IN THE ESTABLISHMENT OF RESEARCH METHODOLOGY

Despite the poor practitioner and patient responses and the fact that this study was not successful in reaching the sample sizes needed to make significant observations relevant to the South African chiropractic population, the results obtained may still benefit the profession of chiropractic as a whole.

Possible reasons for poor response include:

- The bulky appearance of the research material presented to practitioners.
- The length of the questionnaires.
- The lack of interest amongst the practitioners to participate in any study (or in this type of study in particular).
- The limited time available to practitioners and their reception staff.

- The difficulty of the practitioner to understand the sampling methods required in order to randomly select the ten patients needed to participate.
- The reception staff not asking patients to participate.
- Patients and practitioners forgetting to return completed questionnaires.
- Lack of interest on the part of patients.

Recommendations that may eliminate some of the potential problems in future questionnaire studies:

- * Keep research material to a minimum. However, do not post research material in sections, as this increases the possibility of one section not being answered.
- * Limit questionnaires to include only the MOST essential questions needed to obtain relevant data.
- * Complete a pilot study in order to pre-test the questionnaires prior to printing.
- * Make research material as readable, comprehensive and stimulating as possible.
- * Include a vibrant **letter of explanation** to the sample group, in order to spark their interest and increase the likelihood of their co-operation.
- * Keep any instructions to be followed to the minimum, and ensure that they are clear and easy to understand and execute.
- * Where possible, send questionnaires or surveys directly to the patients if their participation is required.
- * Make personal contact with the sample group where possible. Telephonic contact was the most effective and rewarding for both the researcher and the respondents.
- * Include a budget figure that will allow for telephonic communication with practitioners and their staff in order to encourage them to participate, to answer any queries and to remind them to return their completed questionnaires.

- * Send out more questionnaires to the practitioners and/or patients than the actual number of responses needed in your sample group. Thus, in the event of receiving only a percentage of the total response expected, sufficient data will still be available for statistical interpretation of the results.
- * Allow sufficient time for completion and recovering of questionnaires in your time plan. However, there is a need to stipulate a dead-line for participation to your respondents.

5.3 GUIDELINES FOR THE DEVELOPMENT OF A HOLISTIC APPROACH TO CHIROPRACTIC HEALTH CARE

The results discussed in Chapter Four revealed that the concept of holism and the practise of wellness do not necessarily go hand-in-hand. Although practitioners are aware of the inter-relatedness of the mind, body, spirit and environment in health, most practitioners do not discuss this relationship with their patients. For this reason it is recommended that practitioners be made aware of the following:

- * Exercise has an important role to play in achieving and maintaining good health.
- * Stress has a detrimental effect on the mind, body and spirit and will affect the individual's health.
- * Religion or spirituality can play a creative role in an individual's health and well-being.
- * Patients' emotions can influence their physical well-being in a positive as well as in a negative way, and patients rate discussion of this issue as very important.
- * Practitioners have a responsibility to educate patients about healthy eating habits and vitamin and mineral supplementation.
- * Practitioners need to discuss smoking with smokers and non-smokers, to make them aware that smoking is a health risk to the smoker and to others.

- * Practitioners need to be more aware of the possibility of alcohol abuse in their patients. Patients must be educated regarding the detrimental effects that social drinking as well as alcohol in excess have on the body and the mind.
- * Occupational hazards are very real and need to be assessed to determine the effect they have on the patient's well-being. Thereafter, suggestions should be made about the modification or elimination of these hazards.
- * Aspects of medication and drug use feature more often in the community due to the easy accessibility of habit-forming medication and drugs. Practitioners need to increase their awareness of this area accordingly and may consider working in closer co-operation with the patient's medical practitioner.
- * Practitioners need to be aware of the importance of all the spheres of life (physical, mental, spiritual, chemical, emotional, social, financial, and environmental) in the patient's health and well-being.

The purpose of this Section 5.3 is not to develop new institutional goals and objectives in chiropractic education. Instead, it hopes to stress the pre-existence of certain educational goals and objectives associated with chiropractic, and thus create a greater awareness in students and in faculty members of the wider scope of their profession.

The *Educational Standards For Chiropractic Colleges : The Council on Chiropractic Education* defines

A DOCTOR OF CHIROPRACTIC as:

"a physician whose purpose is to help meet the health needs of the public as a member of the healing arts.

He/she gives particular attention to the relationship of the structural and neurological aspects of the body

and is educated in the basic and clinical sciences as well as in related health subjects. Chiropractic science associates itself with the relationship between structure (primarily the spine), and function (primarily coordinated by the nervous system), of the human body as that relationship may affect the restoration and preservation of health. The purpose of his/her professional education is to prepare the doctor of chiropractic as a primary health care provider; to provide students with a base knowledge sufficient for the performance of his/her professional obligations as a doctor of chiropractic. As a portal of entry to the health delivery system, the Doctor of Chiropractic must be well educated to diagnose for chiropractic care, to provide chiropractic care, and to consult with, or refer to, other health care providers as indicated."

The concept of educating the chiropractic student to be a primary health care provider is commendable. However, the concept of a 'primary health care provider' takes on many meanings and it depends on the eye of the beholder to see just what is incorporated into this form of health care. According to the Department of National and Population Development of South Africa (1992), the goals of primary health care are to ensure provision of cost-effective primary health care to all the inhabitants to South Africa on a basis which will ensure: a) accessibility, b) availability, c) affordability, d) equity and e) acceptability.

In light of the above it becomes obvious that the term 'primary health care provider' is not always used in the same context as that of the educational standard for chiropractic colleges and it is debatable whether they are supposed to have the same meaning. It can therefore be concluded that a consensus must be reached as to the meaning of the term 'primary health care provider' as pertaining to the chiropractic profession, in order to clarify the educational components that should by definition be included in chiropractic education.

Practitioners will be required to use various "holistic" terms in their patient interaction should they incorporate this approach into their own practices. In the light of the difficulty in finding definitions for terminology used in this study, especially with regards to 'religion' and 'spirit/spirituality', practitioners need to be aware that there will be varied interpretations of "holistic" terms, such as *wellness* and *homeostasis*, that will be used by them and their patients. I feel that it is essential for practitioners to be aware that a common understanding of such terms needs to exist when they interact with patients. For this reason, the chiropractic profession needs to arrive at a common understanding with regards to terminology in the discipline, in the texts and in the realm of chiropractic philosophy. It is to this latter realm that practitioners could turn for common definitions. It must be remembered that philosophy is dynamic as it continually grows and changes according to clinical experiences and the theories that are incorporated into it. (Kleynhans 1991) Although this open-endedness will make it more difficult to arrive at a set definition for a philosophical concept, it is the opinion of this author that it is not an impossible task to achieve.

Two different aspects relating to the holistic approach, are mentioned in current educational programmes. The first is that the students must be encouraged to become active in their respective communities and to work to the betterment of the human condition. This implies that chiropractors are educated to be aware of the active role they should play in the community and the relationship between the community and the health care. In the light of this it may be suggested that a study be done to determine the degree to which this concept forms part of current student education.

The second aspect mentioned in current educational programmes is that students must be encouraged to be teachers charged with the responsibility of educating the public on health and its achievement through chiropractic care. This study indicated that practitioners in actual fact did very little patient education

in the majority of the health issues discussed in earlier chapters. It is therefore suggested that practitioners be exposed to a form of continuing education to make them aware of the need for a holistic approach in their patient management programmes. It is also suggested that current educational programmes be evaluated in terms of this aspect, to establish whether the 'teaching-role' of a doctor of chiropractic is imprinted on the students.

It is recommended that the chiropractic philosophy and mission statement of chiropractic health care be re-evaluated in order to establish what a practitioner's responsibility is towards the community and his/her patients, and practitioners should be made aware of their responsibility to mankind as Doctors of Chiropractic.

Should such an evaluation reveal that the general definition of chiropractic as a "holistic and primary health care profession" is correct, three final suggestions must be made:

- a) that a general consensus be reached as to the meaning of the term 'primary health care' in the chiropractic profession.
- b) that all practitioners be made aware of the nature of their profession and some type of standard be established in South African chiropractic, where all practitioners fulfil these responsibilities towards their patients in particular.
- c) that current educational programmes be assessed objectively to recognize any areas where student education is lacking or incomplete, especially pertaining to the area of holism and the practice of wellness.

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APPENDIX 7.1

PRACTITIONER QUESTIONNAIRE

ANSWER
COLUMN

Year graduated _____
College attended _____
Years in practice _____

In order to complete this questionnaire please select the number below, or alongside the answer of your choice, and enter this number into the block provided in the answer column on the right hand side of the page.

1. (a) Is your practice located in a:

Town	1
City	2

(b) The population of the town/city in which I practice is:

less than 50 000	1
50 000 - 100 000	2
100 000 - 1 million	3
more than 1 million	4

2. Average amount of time spent per patient during the:

1-10 min	1	First visit
10-20 min	2	Subsequent visits
20-30 min	3	
more than 30 min	4	

3. How often do you think a person should participate in a sporting activity/exercise routine?

Daily	5-6 times per week	2-4 times per week	Never
1	2	3	4

4. How long do you think each session should last?

1-15 min	15-30 min	30-60 min	more than 60 min
1	2	3	4

5. How do you rate the importance of exercise in the general health of your patients?

Essential	Important	Unimportant	Detrimental
1	2	3	4

6. Do you think that stress can influence your own health?

Yes	1
No	2

7. How would you rate the importance of adequate stress-management in personal good health?

Essential	Important	Unimportant	Detrimental
1	2	3	4

8. Do you think a patient's emotions can influence his/her health?

Yes	1
No	2

9. Do you discuss with your patients the role of stress-management in life and give them practical advice in this regard?

Yes	1
No	2

10. If you advise your patients on how to manage their stress, which of the following techniques do you use/suggest?

	Always 1	Frequently 2	Sometimes 3	Never 4
Sleeping				
Medication				
Exercise				
Hobbies				
Reading				
Watching TV				
Socialising				
Meditation				
Prayer				
Vacations				
Bio-feedback				
Hypnotism				
Others				
(specify).....				
.....				

11. Do you think religion has a contribution to make towards achieving good health?

Yes	1
No	2

12. Do you think that a patient's daily activities can influence his/her health? (eg. occupation; family-life; habits, hobbies, etc.)

Yes	1
No	2

13. How often do you think a patient should have time to relax/rest?

Daily 1	5-6 times per week 2	2-4 times per week 3	Never 4

14. Does it concern you whether or not your patient smokes?

Yes	1
No	2

15. Do you smoke?

Yes	1
No	2

16. Do you inquire about possible occupational health hazards that your patient might be exposed to?
(eg. Fumes, noise, chemicals, vibrations, etc.)

Yes	1
No	2

17. In terms of the above,
(a) Do you ever recommend to a patient (or his/her employer)
to try and change their working environment?

Yes	1
No	2

- (b) Do you ever recommend that the patient change his/her occupation?

Yes	1
No	2

18. How important do you rate the influence of diet on good health?

Essential	Important	Unimportant
1	2	3

19. How often do you advise your patients on vitamin/mineral
supplementation?

Always	Frequently	Sometimes	Never
1	2	3	4

20. How often do you suggest specific dietary programmes to your
patients?

Always	Frequently	Sometimes	Never
1	2	3	4

21. How often do you suggest specific exercise programmes to your
patients?

Always	Frequently	Sometimes	Never
1	2	3	4

22. How important do you think it is to discuss the following with
your patients?

	Essential 1	Important 2	Unimportant 3
Recreational activities			
Diet			
Nutritional Supplementation			
Exercise			
Stress Management			
Occupational hazards			
Smoking			
Alcohol intake			
Drug usage (social)			
Medication			
Emotional problems			

23. To what degree do you believe chiropractors should be musculoskeletal
specialists?

Essential	To some degree	Not at all
1	2	3

24. Do you believe your patients generally follow the instructions concerning their management programmes that you give them?

Always	Frequently	Sometimes	Never
1	2	3	4

25. In the light of the above, do you believe it is worthwhile giving your patients specific instructions regarding their condition?

Yes	1
No	2

26. How often does your initial case history and examination include the following?

	Always	Frequently	Sometimes	Never
	1	2	3	4
Past medical history				
Past surgical history				
Systems review				
Ophthalmoscopic exam				
Blood pressure check				
Cardiovascular exam				
Resp. system assessment				
Abdominal examination				
Neurological exam:				
-Sensory				
-Motor				
-Reflexes				
-Cranial nerves				

27. Does your patient management include a diagnosis? (excluding "subluxation" and/or "fixation".)

Always	Frequently	Sometimes	Never
1	2	3	4

28. Does your diagnosis consist only of any of the following: Subluxation, fixation or joint dysfunction?

Always	Frequently	Sometimes	Never
1	2	3	4

29. How often do you make use of the following in your practice?

	Always	Frequently	Sometimes	Never
	1	2	3	4
Adjustive/Manipulative techniques				
Electrotherapeutic techniques				
Traction techniques				
Soft Tissue techniques				
Reflex techniques				

Techniques included in the above categories are as follows:

30. Please underline the techniques you use, and add in any others you use which are not listed.

Adjustive/Manipulative techniques:

Diversified, Gonstead, Toggle-Recoil, SOT-Blocks, Grostic, Pierce-Stillwagon and Thompson Terminal Point.

Electrotherapeutic techniques:

IFC, TENS, Ultrasound, Diathermy, Low Volt, Laser, and Infra-Red.

Traction techniques:

Flexion/Distracton, Cox, McManis, Hill Table, Cervical Traction and Inverted Traction.

Soft Tissue techniques:

Massage, Nimmo, acupuncture, Myofascial Trigger Point Needling, Ischaemic Compression, Spray and Stretch, Ice/heat packs and Vibro- massage. (eg. G5)

Reflex techniques:

Activator, Applied Kinesiology, B.E.S.T, Biofeedback, Reflexology, Logan-Basic and S.O.T

APPENDIX 7.2

PATIENT QUESTIONNAIRE

File #:

ANSWER
COLUMN

Marital status:

Race:

Age:

No. of children:

Sex:

Home language

In order to complete the rest of the questionnaire please select the number below, or along side, the answer of your choice, and enter that number into the block provided in the answer column on the right hand side of the page.

1. How often do you participate in a sporting activity or physical exercise routine?

Daily	5-6 times per week	2 -4 times per week	Never
1	2	3	4

2. For how long do you exercise each session?

1-15 min	15-30 min	30-60 min	more than 60 min
1	2	3	4

3. How would you rate the importance of exercise in your good health?

Essential	Important	Unimportant
1	2	3

4. Do you have much stress in your life?

none	mild	moderate	severe
1	2	3	4

5. Do you think stress influences your own health?

Yes	1
No	2
Maybe	3

6. Do you have ways of coping with your stress?

Yes	1
No	2
N/A	3

7. How often do you feel exceptionally healthy?

Always	1
Frequently	2
Occasionally	3
Never	4

8. How often do you feel exceptionally happy?

Always	1
Frequently	2
Occasionally	3
Never	4

9. Do you feel religion has a contribution to make towards your own health?

Yes	1
No	2

10. If yes, in which way do you think it achieves this?
Mental (thinking) well-being

Yes	1
No	2

Emotional (feelings) well-being

Yes	1
No	2

Physical (bodily) well-being

Yes	1
No	2

11. How often do you take time to relax/rest? (apart from a night's sleep)

Daily	5-6 times per week	2-4 times per week	Never
1	2	3	4

12. How often do you relax in the following manners?

	Often 1	Sometimes 2	Never 3
Sleeping			
Medication eg. sleeping tablets tranquillizers			
Exercises			
Hobbies			
Reading			
Watching T.V			
Socialising			
Meditation			
Prayer			
Holidays (vacations)			
Alcohol			
Smoking			
Other (specify below)			

13. Do you smoke?

Yes	1
No	2

If yes: a. On average, how many cigarettes do you smoke: per day?
or per month?

b. For how long have you been smoking?

c. Do you believe smoking affects your health?

Yes	1
No	2

14. (a) Are you exposed to occupational hazards?
(eg. noise, fumes, smoke, chemicals, vibrations etc.)

Yes	1
No	2

(b) If yes, do you think this has any affect on your health?

Yes	1
No	2

15. How important would you rate the influence of your diet on your health?

Essential	Important	Unimportant
1	2	3

16. Do you take additional vitamins or minerals?

Yes	1
No	2

17. How important do you think it is for your chiropractor to discuss the following with you?

	Essential 1	Important 2	Unimportant 3
Mental well-being			
Emotional well-being			
Physical well-being			
Spiritual well-being			

18. How often does your chiropractor discuss the following with you?

	Often 1	Sometimes 2	Never 3
Recreational activities			
Diet			
Vitamin/Mineral Supplementation			
Exercise			
Stress Management			
Occupational hazards			
Smoking			
Alcohol intake			
Drug usage eg. dagga, cocaine			
Medication			
Emotional problems			

19. If your chiropractor spoke to you about the following, would you give his/her advice serious consideration?

Exercise	Yes	1
	No	2
Diet	Yes	1
	No	2
Stress management	Yes	1
	No	2
Smoking	Yes	1
	No	2
Alcohol intake	Yes	1
	No	2
Medication	Yes	1
	No	2
Surgery	Yes	1
	No	2

20. Do you feel that chiropractors are generally well trained and knowledgeable in the following matters, or do you think they are out of their depth in this area?

	expert knowledge 1	some knowledge 2	Out of depth 3	
Exercise				
Diet/nutrition				
Stress management				
Medication				
Surgery				

APPENDIX 7.3

TECHNIKON
NATAL



✉ 953 Durban 4000
☎ Nattechnikon
✂ 6-20187
☎ City Campus/Stadskampus
(031) 3017823/9 or 3017848/9
☎ Berea Campus/Kampus
(031) 2252111
Fax No. (031) 223405

Dear Doctor

Re. your participation in a research project.

I am FINALLY in my last year of studying chiropractic at the Technikon Natal. As many of you may know, all fifth year students are required to complete a research project as part of their Masters Diploma. It is in the light of this that I send you this rather bulky envelope! Whereas most students chose to conduct clinical studies I have opted for a study that is of particular interest to me and maybe also to you, ie. a study to determine to what extent the concept of 'Holism' and the practice of 'Wellness' form a part of Chiropractic health care. I also wish to look at the clinical methods which field practitioners throughout the Republic of South Africa use in their practices.

In order to complete this mouthful I need your assistance in gathering the necessary data!!!

To obtain this much-needed data all I ask of you is to complete and return to me the enclosed Practitioner's Questionnaire and Practitioner's Informed Consent Document.

Because I would also like to determine the chiropractic patient's perception and experience of holism and wellness in Chiropractic health care, it will be necessary for ten of your patients to complete a Patient Questionnaire. For this reason you will also find ten ten Patient Questionnaires, together with their respective Patient Informed Consent Documents, enclosed in your envelope.

And just when you think you've reached the end of all the 'enclosed' bits, you will find a letter to your receptionist, in which I explain the method of sampling to be used in selecting these ten patients!

I know this may seem like a lot of extra work to you and your staff, but the results of a study of this nature can be AWESOME with far reaching implications for the future of CHIROPRACTIC in South Africa. And that is almost as exciting as completing this course!

The questionnaires should not take you or your patients more than 15-20 minutes to complete.

In order to ensure absolute confidentiality all participants will remain anonymous, and all participants will be supplied with their own self-addressed and stamped return envelope.

When completing the questionnaire it is important to remember that the answers you give must be based on actual occurrences and not on what you think should happen. It is also important to note that there are no correct or incorrect answers, but that I am only interested in your truthful response to these questions.

I shall contact you shortly to answer any questions that you may have regarding the procedure to follow in obtaining the data. However, should you be interested in obtaining more specific details regarding the nature of the study, please feel free to write to me at the above address.

Thank you very much for your time, and once again, your participation in this study will be HUGELY appreciated.

Best wishes

Ilze Kotze
Chiropractic student.

APPENDIX 7.4

TECHNIKON
NATAL



☒ 953 Durban 4000
☎ City Campus/Stadskampus
(031) 3017823/9 or 3017848/9
☎ Berea Campus/Kampus
(031) 2252111
Fax No. (031) 223405

File #:

PRACTITIONER INFORMED CONSENT DOCUMENT.

I have been asked to participate in a study to determine to what degree the concept of 'Holism' and the practice of 'Wellness' form a part of my, and my patients', perception and experience of chiropractic health care. In order to obtain this data, ten of my patients, as well as myself, will be required to complete a questionnaire. I have received all of the aforementioned questionnaires, together with their stamped return envelopes.

The information that will be required from me will be my opinion and experience of chiropractic health care.

Neither my name nor any contact address will appear on the questionnaire. I am not obliged to furnish this information.

I understand that I may withdraw from the study at any time by informing Ilze Kotze in writing of my desire to do so.
I agree to participate in this study.

.....
Name of the Participant
(Please print)

.....
Witness (Signature)

.....
Signature

.....
Date

APPENDIX 7.5

TECHNIKON
NATAL



☒ 953 Durban 4000
☒ City Campus/Stadskampus
(031) 3017823/9 or 3017848/9
☒ Berea Campus/Kampus
(031) 2252111
Fax No. (031) 223405

File #

PATIENT INFORMED CONSENT DOCUMENT

I have been asked to participate in a study to assess various aspects of chiropractic. In order to obtain this data, I am required to complete a questionnaire. The information that will be required from me will be my opinion and personal experience of chiropractic health care.

Neither my name nor any contact address or telephone number will appear on the questionnaire. I am not obliged to furnish this information.

I agree to participate in this study.

.....
Print name

.....
Witness

.....
Signature

.....
Date

P.S When completing the questionnaire it is important to remember that the answers you give must be based on actual occurrences and not on what you think should happen. It is also important to note that there are no correct or incorrect answers, but that I am only interested in your truthful response to these questions.

APPENDIX 7.6

TECHNIKON
NATAL



☒ 953 Durban 4000
☎ Nattechnikon
☎ 6-20187
☎ City Campus/Stadskampus
(031) 3017823/9 or 3017848/9
☎ Berea Campus/Kampus
(031) 2252111
Fax No. (031) 223405

Dear Receptionist

Re: Participation in Research Project

I am studying chiropractic at the Technikon Natal and the end is nearly in sight! With your help I may be able to complete this last lap of my studies by the end of 1993. Let me explain why I need your help in this matter. In order to meet the requirements of this course, I must complete a research project of my choice.

I chose a study that is of particular interest to me, in that it deals with alternative concepts of health care, which has become associated with chiropractic over the years.

In order to complete this study I need ten patients from each chiropractor's practice to complete a questionnaire. Your help comes in the selection of these ten patients.

In order to do this it will be necessary for you to follow the instructions below to ensure that the sample is randomly selected.

1. a. Select any of the following three months: March, April or May of 1993, where the practitioner was in practice for the whole month, and calculate the total number of patient visits to the chiropractor during that time.
- b. Divide this number by 10.
- c. Let us assume the answer you get is 50, then cut the numbers 1-50 from the enclosed slips of numbered papers and place them into a container.
- d. After shaking the container draw ONE number.
- e. Let us assume the number drawn is 24. Starting at the the beginning of the next day, select the 24th patient according to your appointment book to be the first patient in your sample group. Remembering that the number you obtained in step c was 50; you will then continue to work through your appointment book, selecting every 50th patient thereafter, until you have obtained the 1 patients needed for the study. (PLEASE DON'T DESPAIR, THIS IS REALLY NOT THAT COMPLICATED !!!!!)
- f. However, it is important that each patient selected in this manner MUST comply to a set of requirements. The requirements are as follows:
 - i) Patients must have received more than three chiropractic treatments over a period of not longer than six months previously, and all from the chiropractor you work for.

ii) Family members and relatives of the practitioner you work for will not be allowed to participate in the study.

iii) Patients must be 18 years of age or older.

g. Should any of the patients selected by you in this manner NOT comply to all of the above, just take the patient that is the following 50th patient according to your appointment book.

2. Please sign as witness on the Patient Informed Consent Document.
3. If they ask you any questions about how they should fill in the questions, tell them to do the best they can, because it is important that you do not help them in selecting answers.
4. Please keep the attached log up to date. Enter the date and the file number for each patient who completes and returns to you a questionnaire. A separate file number has been entered at the top of each questionnaire, which is the number to enter on the log. Place a cross in the "Non-compliers" column for each patient who refuses to complete a questionnaire.
5. I have enclosed stamped return envelopes for each patient, and I would appreciate it if you could give these to the patients together with their questionnaires. This will ensure that all replies remain strictly confidential.
6. Kindly return to me all logs and sealed questionnaires once they have been completed.
7. It takes the patients between 15-20 minutes to complete the questionnaires. You, therefore, may wish to ask the selected patients to come in 20 minutes earlier than their actual appointments, or they can complete them elsewhere. However, if possible try and insure that they complete and return the questionnaires that same day.

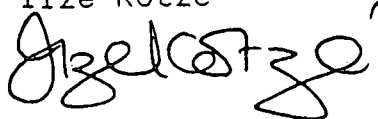
I know this just sounds like a lot of extra work to you, but I can assure you it is nothing compared to the hours of work that has gone into the past five years of studying in order to get to this EXCITING, LAST PHASE of student life. Your cooperation in this matter is VITAL to the success of this study and I will forever be in your debt if you could see your way clear in helping me with these questionnaires. If you need any further assistance, do not hesitate to phone me at:

(031) 210543 (Home)
(031) 2252205 (Clinic)

I promise I will never send you any more forms to fill in or read through!!!!

THANKS FOR YOUR COOPERATION!!

Ilze Kotze



1	11	21	31	41
2	12	22	32	42
3	13	23	33	43
4	14	24	34	44
5	15	25	35	45
6	16	26	36	46
7	17	27	37	47
8	18	28	38	48
9	19	29	39	49
10	20	30	40	50

51	61	71	81	91
52	62	72	82	92
53	63	73	83	93
54	64	74	84	94
55	65	75	85	95
56	66	76	86	96
57	67	77	87	97
58	68	78	88	98
59	69	79	89	99
60	70	80	90	100

APPENDIX 7.7

PATIENT LOG

DATE _____
EXTENSION TELEPHONE NO. _____

FILE NUMBER

NON-COMPLIERS

[illegible]

APPENDIX 7.8

As discussed in Section 4.3.4.3, Question 26 required an indication of how often practitioners included a patient case history and physical examination procedures in initial consultations. The results were tabulated in Figure 37. However, the individual results will briefly be discussed in this section.

a) Past Medical History

Although Question 26 only included the heading "Past Medical History" it is the understanding of this author that under such a heading the following aspects are incorporated:

- * general state of health
- * childhood illnesses
- * adult illnesses
- * psychiatric illnesses
- * accidents and injuries
- * hospitalizations

Of the 32 practitioners, 81.25 percent replied they always included a past medical history, 3.13 percent replied they frequently did, and 12.50 percent replied "sometimes". There was 3.31 percent who said they never included this.

b) Past Surgical History

This referred to a brief inquiry into past operations or surgical procedures. Again the majority of practitioners (87.50 percent) replied "always" and 3.13 percent replied "frequently". The other 9.38 percent said they sometimes included a past surgical history in initial consultations and no-one said they never included it. It would seem that practitioners rated past surgical history as more important to the initial consultation, than past medical history.

c) Systems Review

This referred to a brief history in which the practitioner inquires about each system in the patient's body, in order to establish the presence of any significant diagnostic criteria.

The results revealed that 40.60 percent of the practitioners always did a systems review during the initial consultation, 15.60 percent said they frequently did, and 28.10 percent said they sometimes did. A further 15.60 percent said they never did a systems review during the initial consultation.

d) Ophthalmoscopic Examination

Only 6.25 percent said they always did an ophthalmoscopic examination during the initial consultation, and another 6.25 percent said they frequently did. There were 43.75 percent who replied that they

sometimes did an ophthalmoscopic examination during the initial consultation, and another 43.75 percent said they never did.

e) Blood Pressure Check

There were 31.25 percent who said they always included a blood pressure check in their initial consultation. A further 18.75 percent said they frequently did, and 40.63 percent said they sometimes did. Only 9.38 percent said they never did a blood pressure check during the initial consultation. It can therefore be concluded that practitioners rated a blood pressure check as more important than the ophthalmoscopic examination during the initial consultation.

f) Cardiovascular Examination

Once again the practitioner questionnaire only included the heading "Cardiovascular Examination" and the following procedures are those believed to form part of such an examination by this author:

- * assessment of the heart rate
- * assessment of the arterial pulsations
- * assessment of the jugular venous pulsations
- * inspection and palpation of the chest
- * percussion of the chest
- * auscultation of the chest

Only 12.50 percent of the practitioners said they always included a cardiovascular examination in the initial consultation. Another 9.38 percent said they frequently did and 46.88 percent said they sometimes did. There were 31.25 percent who said that they never included a cardiovascular examination in initial consultations.

g) Respiratory System Assessment

Although not included in the practitioners' questionnaire the following is deemed to form part of a respiratory system evaluation by the author :

- * inspection of the anterior and posterior chest
- * palpation of the anterior and posterior chest
- * percussion of the anterior and posterior chest
- * auscultation of the anterior and posterior chest

Again 31.25 percent said they never assessed the respiratory system during initial consultations. As with the cardiovascular examination, 12.50 percent replied that they always included a respiratory assessment and 6.25 percent said they frequently did. The other 50 percent said they sometimes did.

h) Abdominal Examination

Question 26 did not include the following aspects but once again this author views them as components of an abdominal examination :

- * inspection of the abdomen and groin area
- * auscultation of the abdomen and inguinal area
- * percussion of the abdomen
- * palpation of the abdomen

Here only 18.75 percent of the practitioners said they never examined the new patient's abdomen. However, only 12.50 percent said they always examined it and 6.25 percent said they frequently did. The majority (62.50 percent) said they sometimes did.

It could therefore be concluded that the majority of practitioners did not rate it as essential to always include an abdominal examination in initial consultations, instead they only included it in some instances.

i) Neurological Examination

This included :

- * sensory system assessment
- * motor system assessment
- * assessment of the reflexes
- * cranial nerve assessment

The question was divided into these four components and the practitioners were asked to state how often they completed each component of this examination, during an initial consultation.

* Sensory Examination

The results revealed that 46.88 percent said they always included a sensory examination of the neurological system in the initial consultation. Another 37.50 percent said they frequently did and 12.50 percent said they sometimes did. Only 3.13 percent (one practitioner) said he/she never included the sensory examination in initial consultations.

* Motor Examination

Here 50 percent replied that they always included this component of the neurological examination in initial consultations. Another 34.38 percent replied that they frequently did and 12.50 percent said they sometimes did. Again only 3.13 percent (one practitioner) said that he/she never included the motor component of the neurological examination in initial consultations.

* Reflexes

There was 40.63 percent of the practitioners who responded that they always assessed the new patient's reflexes. A further 31.30 percent said they frequently did, and 18.75 percent said they sometimes did. Only 6.25 percent said they never assessed the reflexes during initial consultations.

* Cranial Nerve Examination

In this section, 15.60 percent of the practitioners replied that they always included cranial nerve assessment as part of initial consultations. A further 28.10 percent said they frequently did, and 37.50 percent replied that they sometimes did. The other 18.80 percent said they never assessed cranial nerves during initial consultations.

It could therefore be concluded that the majority of practitioners rated the neurological examination as important in the evaluation of the new patient. The above assessment of the individual neurological components revealed that practitioners more often included the motor, sensory and reflex examinations in initial consultations. Although quite a large percentage of practitioners also included the cranial nerve examination (81.30 percent), it was on a less frequent basis than the other three components.

APPENDIX 7.9

In Section 4.3.2.5 the various chiropractic techniques utilized by South African chiropractors were tabulated in Figure 40. In this section the results will be discussed individually.

a) Adjustive/Manipulative Techniques

The results revealed that 78.13 percent of practitioners replied they often made use of adjustive/manipulative techniques. A further 15.63 percent said they frequently did, and 6.25 percent said they sometimes did. There was no practitioner who said he/she never used adjustive/manipulative techniques.

b) Electrotherapeutic Techniques

Only 9.38 percent said they always made use of electrotherapeutic techniques, 18.75 percent said they frequently did, and 28.13 percent said they sometimes did. A further 43.75 percent said they never used electrotherapeutic techniques.

c) Traction Techniques

Only 12.50 percent said they always made use of traction techniques in their practices, 18.80 percent said they frequently did and 40.60 percent said "sometimes". The other 28.10 percent said they never used traction techniques.

d) Soft-Tissue Techniques

In this category, 46.90 percent said they always made use of soft-tissue techniques in their practices, 40.60 percent said they frequently did, and 12.50 percent said "sometimes". There was no practitioner who said that he/she never used soft-tissue techniques.

e) Reflex Techniques

The results revealed that 29 percent replied that they always made use of reflex techniques, whilst 19.40 percent said they frequently did. A further 22.60 percent said they sometimes did and the other 29 percent said they never used reflex techniques.

It could therefore be concluded that the technique categories most frequently used by practitioners, were adjustive/manipulative and soft-tissue techniques, followed by traction and reflex techniques. Electrotherapeutic techniques were the least frequently used by practitioners.