



A Science of Medicine
The Art of Care

Pilot research project conducted at the University of the Western Cape comparison of lifestyle changes to clinical disorders as advised in orthodox medicine & Unani-Tibb

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Evaluation Report:

A pilot Research Project undertaken by Unani-Tibb Diploma Students on the comparison of the approach of lifestyle change to a number of clinical disorders as advised in conventional (or orthodox) medicine and Unani-Tibb therapy.

Keywords: Chronic disorders; lifestyle advice; conventional medicine; Unani-Tibb

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Executive summary

Introduction. A mandatory requirement for the award of the University of the Western Cape postgraduate Diploma in Unani-Tibb is the satisfactory completion of a research project on the treatment of patients with specific disorders according to Unani-Tibb principles.

The primary objective of the research project for 2007 is to compare the lifestyle advice offered by conventional medical practitioners in a number of common chronic disorders, such as hypertension and diabetes, with that offered by practitioners of Unani-Tibb. The secondary objective is to evaluate the advice in terms of the rationale and philosophy underlying both of these medical paradigms, and to evaluate the similarities and differences between them.

This report summarises the individual projects completed. It complements an earlier, 2006, study, which assessed the effect of lifestyle factors on the clinical course of patients with a number of chronic disorders.

Methodology. Twelve student researchers were involved in this study. Each detailed the lifestyle advice offered by conventional medical practice, and compared this with the advice proffered by Unani-Tibb in the treatment of a number of defined clinical disorders. At the same time, the underlying philosophy of both sets of advice was compared.

Results. The clinical disorders compared were, in terms of frequency, Type 2 diabetes, hypertension, bronchial asthma, gastritis, HIV and Aids, hyperthyroidism, obesity, depression, hypercholesterolaemia, acne vulgaris, haemorrhoids and rheumatoid arthritis. Most researchers correctly identified the advice offered in the conventional medical context for these disorders, and the scientific or clinical reasons for such advice. The researchers also accurately described the advice available from Unani-Tibb, and where it was similar or dissimilar to that of conventional medicine. The reasons for the Unani-Tibb advice were generally correctly identified in terms of temperamental, humoral and qualitative imbalances, and lifestyle (governing) factors.

Conclusion. Conventional medicine and Unani-Tibb often advise lifestyle changes to patients suffering from a number of chronic diseases of lifestyle which is similar in content, but for different reasons. In conventional medicine, the advice is based on underlying lesions in biochemical or functional disorders, whereas in Unani-Tibb it relates to the patient's humoral and qualitative imbalance, which allow for a better understanding of the rationale behind the advice given. Because of this, most of the researchers felt that Unani-Tibb had much to offer in ameliorating the increasingly frequent diseases of lifestyle affecting much of the South African population.

1. Introduction

Unani-Tibb has traditionally adopted a holistic approach to the prevention and treatment of disease. As part of the treatment of a chronic, long-term or recurring clinical disorder, Unani-Tibb therapy is largely orientated towards the identification and remedy of adverse lifestyle (or, in Unani-Tibb terminology, *governing*) factors. According to Unani-Tibb, lifestyle diseases are defined as diseases which arise because of an inappropriate relationship between a person and his or her environment.

The term *lifestyle disease* has become common currency in the healthcare field. Lifestyle diseases are generally regarded as diseases which arise because of the way people choose to live their lives. For several decades, the incidence in the Western, industrialised countries of hitherto rare disorders such as type II diabetes, coronary heart disease and certain cancers has been climbing inexorably.

Somewhat ironically, this has occurred in a period of history where the 'traditional diseases' resulting from infection, malnutrition, poor hygiene and crowded, cramped living conditions are in marked decline.

There are several reasons for this shift in the disease burden profile. The diet has changed, as cheap, calorie-dense food has become more widely available; people are less inclined to physical exercise; people are incapable of dealing with an increasingly obtrusive stress in daily social and occupational life; and the use of recreational drugs and alcohol has become pervasive.

Unfortunately, the newly industrialised, developing countries have not been spared this shift in emphasis from traditional disease to lifestyle disease. Increasing numbers, especially those in the increasingly affluent sector, now have access to lifestyles, especially food and stress-load, which render them prone to numerous, previously rare disorders like obesity and Type II diabetes.

The prevention and treatment of the diseases of lifestyle are assuming more importance in developing countries. Lifestyle diseases are distinct from other diseases, because they can be prevented by conscious changes to the diet, behaviour and environment. Moreover, in most people affected the particular disease afflicting them runs a chronic course, although there may be acute, usually brief, exacerbations. These lifestyle diseases are, therefore, ideal candidates for treatment by integrative medical practice. A number are tabulated below:

	Major lifestyle diseases	Other lifestyle diseases
The	<i>Diabetes, esp. Type 2</i>	<i>Arthritic diseases, especially osteoarthritis</i>
	<i>Obesity</i>	<i>Dental diseases, esp. periodontal diseases</i>
	<i>Cardio-vascular disease, including hypertension and coronary heart disease</i>	<i>Digestive disorders, esp. gastritis and irritable bowel syndrome</i>
	<i>Certain cancers</i>	<i>HIV & AIDS</i>
	<i>Osteoporosis</i>	<i>Liver diseases – cirrhosis, hepatitis</i>
	<i>Stroke</i>	<i>Skin disorders- acne, allergies</i>
	<i>Psychiatric disorders, including anxiety & depression, bulimia and anorexia</i>	<i>Alzheimer’s disease</i>

success of modern conventional medicine in dealing with these lifestyle diseases has been somewhat patchy. In the middle decades of the last century, the future of medicine and surgery for the developed (and developing) countries looked bright. There was a confidence that people would lead longer, healthier, higher quality lives. Unfortunately, this did not come to pass. In spite of spending huge amounts on medical research and development, there has arguably been little if any improvement in quality of life or expectancy. In fact, in some developed countries there has recently been a marked *decrease* in life expectancy, and an alarming increase in the mortality rate of the young. This is in spite of the appearance of a plethora of drugs which have been shown undoubtedly effective in dealing with the symptoms of the lifestyle diseases – hypoglycaemic agents, antihypertensive drugs, lipid lowering drugs, appetite suppressant, antidepressants, etcetera.

One possible explanation for this is that the conventional doctor regards the body as a machine, albeit unbelievably complex. This attitude, admittedly, has served the medical profession well for some time. If the body is effectively a machine, then high-tech intervention to ameliorate dysfunction is the favoured option. Suppression of the signs and symptoms of the patient’s disease as quickly and effectively as possible became the basic objective of conventional therapy.

This basic tenet of conventional medicine, however, does not take into consideration the body’s exquisite range of subtle, sophisticated defensive, self-regulation and self-repair mechanisms which underpin its powerful propensity for self-healing. These are so effective that around 90% of disorders will respond to this self-healing potential.

There is now substantial, mounting evidence that attaining health and our response to disease is influenced powerfully not only by the self-healing forces, but by a range of other more subtle influences – our temperament, our attitudes, our frame of mind, and our spiritual state. In other words, our health status is the resultant of mental and spiritual, as well as physical, agencies.

This is where Unani-Tibb makes its mark – either alone, or in partnership with conventional medicine as integrative medicine. Unani-Tibb offers a flexible range of therapies for patients suffering from the

lifestyle diseases, especially Type 2 diabetes, hypertension, depression and others. This range of therapies is based upon a theoretical foundation, namely governing factors. *This will be dealt with in detail in a later section.*

2. Objectives of the research project

The *primary objective* of this study is to compare and evaluate the advice offered towards lifestyle modification in patients with one of a number of chronic disorders, from the perspective of both Unani-Tibb medicine and conventional medicine.

The *secondary objective* is to compare and contrast the advice given by the two medical systems in terms of their philosophical rationale.

There are also a number of spin-offs from the study. It presents the opportunity of promoting lifestyle modification as a process for delaying the onset of chronic diseases. Furthermore, it allows the acquisition of more data connecting temperament, humoral imbalances, qualitative frames and the type of chronic disorder affecting the patient.

3. Literature review

3.1. Outline of Unani-Tibb

Unani-Tibb is a comprehensive healing system which has its roots in early Greek, Arabic and Western medicine (Azmi, 1995). It is a humanistic and holistic approach to health and illness, which recognises the physical, mental, emotional and spiritual contributions to health (Bhikha and Mohammed, 2004). The philosophy of Unani-Tibb is based upon concepts related to healthcare; the main ones from the perspective of this report are physis, humours, temperament, qualities and the governing (lifestyle) factors. These concepts allow for the comprehensive understanding of aetiology, pathology, diagnosis and therapeutics in Tibb medicine (Bhikha and Haq, 2000).

Physis is the body's innate drive and capacity to preserve health and where necessary self-heal any ailment. (Chishti, 1991). This concept is not unique to Unani-Tibb, but exists in a number of traditional and complementary health systems (Weil, 1997). In effect, treatment with Unani-Tibb in disorders such as HIV and Aids is aimed at bolstering the patient's innate capacity for self-healing, by supporting the myriad of mechanisms, such as the immune system, which assist the patient's body in counteracting the hostile outer environment and rectifying unwanted disturbances to inner harmony.

Humours. In Unani-Tibb, the humours are the primary fluids which are manufactured by the liver from the food and drink we consume (Bakhtiar, 1999). Every level of organisation in the body – sub-cellular organelles, cells, tissues and organs – is infused with, and interconnected by, the humours. A proper balance of humours within a person's body ensures efficient metabolism, prevents the build-up of toxins, and maintains optimum health. They give rise to all components within the body. Humoral imbalance is often the root cause in the origin and development of a particular illness. The humoral theory is consistent with the concept of the four elements – *air, earth, water* and *fire* – and with the

concept of four qualities – *moistness, dryness, cold and heat*. There are four humours: blood, which corresponds to the *sanguinous humour*; phlegm (*phlegmatic humour*); yellow bile (*bilious humour*); and black bile (*melancholic humour*). One of the most important functions of the humours is to maintain the ideal qualitative states associated with the temperament of an individual.

Temperament. This concept defines the uniqueness of a person (Rolfe, 2002). It is a collective measure of a person's physical constitution and psychological profile, or personality. This concept has endured from its origin centuries ago, and is still applied, with suitable modifications, in many medical and scientific spheres (Azmi, 1995). A patient's temperament is the combination of their physical characteristics and their mental, emotional and spiritual attributes.

The four temperamental types are:

- ♦ Sanguinous (with qualities of Hot and Moist)
- ♦ Phlegmatic (with qualities of Cold and Moist)
- ♦ Bilious (with qualities of Hot and Dry)
- ♦ Melancholic (with qualities of Cold and Dry)

Every person has attributes from all four temperaments with a dominance of one of the temperament types. In addition to each person having a unique temperament, each person also has an ideal combination of qualities that is unique. This explains, for example, why some people feel colder / hotter than others. The temperament and associated qualities of a person have a great influence on predispositions to illnesses as well as pathological and therapeutic processes.

The Tibb concept of temperament and its predisposition to specific illnesses is based on the qualities associated with the temperament of the individual. Unani-Tibb applies this concept not only to the patient being treated, but to the disorder affecting him or her, and even to the type of medication or activity recommended as therapy. Unani-Tibb affirms that each patient should be treated individually (Bhikha and Haq, 2000). That is, treatment should be *patient specific*.

Governing (lifestyle) factors. These are the lifestyle and environmental factors which collectively influence a person's state of health. They are also heavily involved in the processes which lead towards disease (Bakhtiar, 1999). There are six main ones which have direct relevance to Unani-Tibb therapy – (1) atmospheric air and breathing; (2) the person's diet and eating practice; (3) bodily movement and rest; (4) sleep and wakefulness; (5) the emotional state; and (6) the toxin elimination processes. Each of these factors is involved to varying degrees in the Unani-Tibb health maintenance and therapeutic regimens. The lifestyle factors influence our health by the qualities they exert, for example, certain foods such as ginger have heating properties; the weather has a hot, cold, moist or dry qualities; movement increases heat; sleep has a cooling effect and anger increases heat. These changes in qualities from the environment affect the ideal qualitative state of our temperament.

Qualities and disease. From the above discussion on temperament, humours and lifestyle factors, we realise how important the four qualities in nature are in health maintenance and the cause of disease. In Unani-Tibb all clinical disorders can be classified according to qualitative and humoral imbalances

(Bakhtiar, 1999) For instance, colds and flu are associated with excessive quality of moistness (phlegmatic humour), whereas osteoporosis is associated with an excess quality of dryness (melancholic humour).

Unani-Tibb therapy. Treatment of chronic ailments is carried out by way of four approaches (Bhikha and Haq, 2000). All of them aimed at correcting qualitative imbalances associated with the humours and temperament of an individual.

- (1) Dietotherapy according to the patient's temperament and the nature of the ailment (Vallee and Bhikha, 2003);
- (2) Pharmacotherapy – that is, treatment with one or more of a range of herbal products;
- (3) Regimental therapy, which includes a number of therapeutic interventions, such as purging, cupping, diuresis and fasting; and
- (4) Advice and application of changes to the patients governing (lifestyle) factors. This aspect of therapy is the focus of the research project summarised here.

3.2. Comparison of the Unani-Tibb and conventional medical approaches to lifestyle

The temperamental and humoral theories of Unani-Tibb allow for a comprehensive understanding of the rationale behind lifestyle advice offered. The qualitative effect of lifestyle relative to the qualities associated with the clinical disorder forms the basis of this understanding. For example, the application of lifestyle factors for an individual with a cold and flu is aimed at adopting lifestyle changes that will increase the heat and dryness, thus opposing the excess cold and moistness and so restoring homeostasis.

Generally speaking, conventional medicine attaches extensive importance to the role of signs and symptoms in the diagnosis of clinical disorders such as hypertension and diabetes. Typical signs include physical parameters, such as blood pressure, blood sugar levels, forced expiratory volume, and CD4 counts. Typical symptoms include nose bleeds, headache, breathlessness and weakness. Unani-Tibb accepts the importance of such signs and symptoms in arriving at an accurate diagnosis. However, it does include in its diagnosis of a disease a reference to underlying changes in qualities and humours, plus a reference to the patients temperament. Diseases are usually described in terms of qualitative imbalance; for example, the major form of hypertension is described as a hot and moist (or sanguinous) imbalance, whereas osteoporosis is a cold and dry (or melancholic), imbalance.

3.2.1. Hypertension

- ♦ In conventional medicine, hypertension is defined in terms of physical blood pressure readings. As far as aetiology is concerned, hypertension arises either from an increase in total peripheral resistance, or from an increase in blood volume. The reason(s) for changes in these two parameters are rarely if ever proposed, although a reference to too much dietary salt or stress may be

mentioned. The disorder is therefore defined in terms of signs and symptoms, and no real effort made to describe the underlying changes which precede and aggravate the disorder. This paradigm differs from that of Unani-Tibb, which explains the abnormal rise in blood pressure in terms of changes to the affected person's qualities and humours, and his or her temperament.

- ♦ In Unani-Tibb, there are two main types of hypertension:

Hypertension due to an imbalance in the hot and moist qualities

- ♦ This is the most common imbalance found in hypertensive people. Those who have a dominant or sub-dominant *sanguinous* temperament are at greatest risk. The imbalance in this type of hypertension shows up as an increase in the volume of blood circulating within the body.
- ♦ This form of hypertension results from the person consuming excessive amounts of hot & moist foods which increase the sanguinous humour, as well as incorrect management of other governing factors. This leads to an excess of hot and moist qualities.
- ♦ This form of hypertension is also known as *essential* hypertension.
- ♦ This study focuses mainly, but not exclusively, on the hot and moist (essential) hypertension.

Hypertension due to an imbalance in the cold and dry qualities

- ♦ This type of hypertension is usually found in those who have a *melancholic* dominant or sub-dominant temperament. It arises from a person having a melancholic (cold and dry) imbalance in the vascular system, leading to increased rigidity of the person's blood vessels.
- ♦ The elevated blood pressure is due mainly to the person consuming too much food which is predominantly cold and dry, resulting in an increase of the melancholic humour, as well as increasing the cold and dry qualities from persistent abuse of the governing factors.

3.2.2. Type 2 diabetes

- ♦ In conventional medicine, Type 2 diabetes is diagnosed by reference to blood glucose levels, which may be abnormally high for a person at a particular time related to food ingestion. The reasons for such abnormally high levels are rarely stated, apart from reference to obesity or the nature of food taken. This is in contrast to the situation with Unani-Tibb, where the disorder is diagnosed not only in terms of blood glucose levels, but also with reference to temperament and changes in the affected person's qualities and humours.
- ♦ According to Unani-Tibb, Type 2 diabetes is a hot and moist disorder arising from the accumulation of excess moisture in the body. This results in the metabolic processes in the body being 'turned down', so that less heat is formed. This becomes worse as the person gets older.
- ♦ Another aggravating factor is the consumption of predominantly moist foods, excessive weight gain and the lack of exercise. All of these factors contribute to a reduction in heat levels within the body.
- ♦ On the basis of this, Unani-Tibb predicts that persons who have a dominant or sub-dominant sanguinous temperament will be predisposed to develop Type 2 diabetes. In addition, those with a

sanguinous/phlegmatic combination will be at even greater risk, as their temperament will have an excessive build-up of moistness.

- ◆ Those people who have a bilious temperament (that is, hot and dry qualities) in either dominant or sub-dominant position will be at *less* risk of developing Type 2 diabetes, because excess moistness will be neutralised by the heat and dryness associated with the bilious temperament.

3.2.3. Bronchial asthma

- ◆ In conventional medicine, bronchial asthma is an all-embracing term usually applied to all types of transient breathing disorders. It is characterised in terms of symptoms – dyspnoea, cough, fluid accumulation in the lung. The disorder is considered an inflammatory process of the bronchial tissue. The underlying reasons for the development of the condition are usually noted as allergy (extrinsic asthma) or in reaction to internal infection or hormonal changes (intrinsic asthma).
- ◆ In contrast, Unani-Tibb classifies breathing disorders into three different categories (a) associated with excessive phlegmatic humour (accumulation of phlegm in the alveoli); (b) associated with the melancholic humour (dried tight chest as in emphysema); and (c) associated with heat (allergic reaction). This study is related predominantly to phlegmatic breathing disorders.
- ◆ Phlegmatic bronchial asthma results from an accumulation of the phlegmatic humour due to an excessive intake of hot and moist and cold and moist foods, and from incorrect management of the other governing factors.
- ◆ In this type of asthma, breathing difficulties arise because of the accumulation of phlegmatic humour. Insipid, thin or thick, sweet phlegm is produced and this accumulation causes the problem. This is mostly associated with the moist and hot or cold and moist qualitative frames.

3.2.4. Gastritis

- ◆ Symptoms of gastritis include abdominal pain, a bloated feeling with belching, nausea, vomiting and a burning sensation after eating. The causes of both acute and chronic forms are lifestyle related. The former often arises from ingesting copious amounts of alcohol, or other irritating dietary items, whereas the latter comes about usually as a result of heavy smoking and chronic alcoholism. Gastritis may progress to gastric ulcers or gastric cancer.
- ◆ Unani-Tibb regards gastritis as a hot and dry disorder resulting from an excess of bilious humour. This may arise from poor eating habits such as excessive hot and dry foods and too many greasy, spicy items. Alcohol and caffeine containing drinks also contribute. Other governing factors are also involved – stress, anxiety, tension and anger can lead to gastritis.
- ◆ Conventional medicine regards gastritis as an inflammation of the mucosal lining of the stomach, usually as the result of long term infection by *Helicobacter pylori* bacteria. Treatment invariably revolves around demulcents, antacids, proton pump inhibitors and histamine-2 antagonists. Lifestyle changes are not usually recommended, apart from dietary modifications.

3.2.5. HIV and Aids

- ◆ As we are all aware, the cause of HIV and Aids remains controversial. There are two main camps in this debate. There is the mainstream view of scientists who support the 'virus-origin' theory, where HIV and Aids is regarded as largely a sexually transmitted viral disease, resulting in a number of signs and symptoms which relate to a progressively compromised immune system. Alternatively, there is the view of the so-called 'Aids dissidents' who support environmental factors such as poverty and poor diet. The latter group regards the viral origin of Aids as being coincidental; claiming that the virus observed in infected people's body fluids has not been categorically or conclusively shown to be responsible for the signs and symptoms of AIDS. Conventional medicine does not consider to any significant extent the various negative influences on the patient's capacity for inner, self healing.
- ◆ According to Unani-Tibb, the person's temperament will to some extent influence the course of the disease, especially whether or not the person will go on to succumb to one or other opportunistic infection such as tuberculosis or oral thrush.
- ◆ The typical signs and symptoms associated with HIV and Aids (vomiting, diarrhoea, weight loss and thrush) are associated with cold and moist qualities, and with the phlegmatic temperament. People who are HIV-positive, and who have a dominant or sub-dominant phlegmatic temperament, are at greater risk of suffering from these symptoms.
- ◆ Conversely, people with a dominant or sub-dominant *bilious* temperament will be less likely to complain of these symptoms. These people are more likely to elicit the signs and symptoms typical of inflammatory illnesses, such as tuberculosis, swollen glands and lymphatic complaints. These are associated with the qualities of heat and dryness.

3.2.6. Other disorders

- ◆ *Acne*. Unani-Tibb regards acne vulgaris as an inflammatory skin disorder caused by a dry and hot, or bilious, imbalance. It affects 60% to 80% of young people. It is linked to swings in hormone production, especially of the androgens, during puberty. As a result, skin keratin and sebum production is affected, leading to blocked skin pores and subsequent inflammation. Distortions in several governing factors are implicated in the onset and maintenance of this disorder. Conventional medicine views acne as inflammation of the sebaceous glands due to infection arising mainly from poor hygiene and faulty diet leading to hormone-mediated excessive production of sebum.
- ◆ *Depression*. Unani-Tibb views depression as a moist and hot to cold and moist qualitative imbalance due to the accumulation of phlegm in the body. This build-up affects all the body, especially the nervous system, where cognition, behaviour and mood become abnormal for the person. Diet and other governing factors are regarded as major contributors to the disorder, especially stress, which can act as a potent trigger. Conventional medicine regards depression as arising from disturbed activity in dopamine and serotonin receptors in specific parts of the brain, with treatment aimed at redressing this balance.

- ♦ *Haemorrhoids*. In Unani-Tibb, this disorder – swollen veins in the anal area – is due to an excess of dryness. The non-bleeding form is due to a cold and dry imbalance, and the bleeding form from a dry and hot imbalance. Symptoms include burning pain, intense itching, swelling and seepage. Unani-Tibb considers poorly adhered to governing factors, especially diet, as the cause or causes. Treatment revolves around adjustment of the governing factors, esp. diet, exercise and local detoxification. Conventional medicine regards haemorrhoids arising mainly from the strain of constipation, and sometimes from diarrhoea. Treatment usually involves digital manipulation where possible, or diet changes to minimise constipation. Faecal softeners are commonly used.
- ♦ *Hypercholesterolaemia*. This chronic disorder is considered by Unani-Tibb to be due to a cold and dry, or melancholic, imbalance. Conventional medicine views the disorder as the end-point in excessive production of cholesterol in order to supply more bile acids required for the absorption of excessive levels of fats in the modern diet. Both systems accept that the disorder leads to an increased risk of serious cardiovascular disorders, such as myocardial infarction, stroke and kidney disease.
- ♦ *Hyperthyroidism*. This disorder, which manifests as a wide range of signs and symptoms such as protruding eyes, anxiety and weight loss, arises from an abnormal production in the body of the thyroid hormones. Conventional medicine considers it arises from overactivity or overgrowth of the thyroid gland, or due the formation of a tumour, or secondary to Graves disease. Unani-Tibb ascribes this disorder to a hot and dry, or bilious, imbalance. The governing factors are brought into therapy as a way of restoring qualitative balance. Dietary changes are advocated. Included in these are consumption of the appropriate foods, ensuring adequate rest and sleep, and regular physical and breathing exercises.
- ♦ *Obesity*. Conventional medicine regards this common nutritional disorder as the accumulation of excess body fat as the result of too much food plus too little exercise. There may be a significant genetic component affecting appetite and satiety. Treatment revolves around appetite suppressant drugs, a low calorie diet, controlled physical exercise and counselling. Unani-Tibb regards obesity as a moist and hot disorder, caused by poor metabolic functioning, or more usually, by poor, uncontrolled eating habits, esp. of fried, calorie rich, foods. Treatment focuses on reduced food intake, combined with physical exercise and the restoration of the other governing factors.
- ♦ *Osteoporosis*. This is a progressive, ageing-related decrease in bone minerals and protein resulting in decreased bone strength and an increased tendency to fracture. In Unani-Tibb, this disorder arises from a cold and dry, or melancholic, imbalance. The governing factors feature prominently, as diet, lack of exercise and other behavioural factors are involved in its appearance. Governing factors are also brought into therapy – dietary changes, increased elimination by increasing fluid intake, adequate sleep and rest, light exercise, and breathing exercises. Conventional medicine, the loss of bone tissue results in brittle bones, and can be caused by infection or injury, but usually from a diet

with inadequate calcium intake. Treatment revolves around drug therapy and calcium plus magnesium supplementation.

- ♦ *Rheumatoid arthritis*. Symptoms include pain in the joints, stiffness, fatigue, sometimes a low fever, redness and swelling. In Unani-Tibb, this is a hot and moist to moist and hot imbalance. A number of governing factors are implicated, including excess intake of certain high-salt content dietary items, humid, cold weather, smoking and stress. Non-pharmacological treatment includes dietary changes, reduction in excess body mass if present, and appropriate physical exercise. Conventional medicine sees rheumatoid arthritis as an auto-immune inflammatory disease of the synovial membrane lining the joints. Treatment is heavily drug therapy based, with anti-inflammatory drugs, steroids and other immune suppressants.

4. Research methods and instruments

4.1. Study design

This research project is a prospective observational study, with pooled data from 12 researchers.

4.2. Study sample

No patients were directly involved in this study. No investigations or face-to-face contacts were carried out. This project is essentially a review exercise, providing information for the Unani-Tibb clinical database on the inter-relationships between disease, qualities, temperament and the governing factors.

4.3. Timeframe for the study

The research project took place over a four-month period.

4.4. Researcher and project leader details

Principal researcher: Prof Rashid A Bhikha

Project leaders: Dr Flangeni Manxiwa, Dr Muhammed A Haq

Researchers: E T Binase, A Dockrat, A Docrat, J Dorfan, M B Golintete, B Mayixale, V V Ngceba, P I Ntlangeni, N E Petene, J J A de Smidt, B Tabata, N S Xuma,

4.5. Clinical disorders studied

The following clinical disorders were studied in the course of this project:

Clinical disorder	Number of researchers
Hypertension	11
Diabetes Type 2	10
Bronchial asthma	9
Gastritis	4
HIV / Aids	3
Obesity	3
Rheumatoid arthritis	2
Hyperthyroidism	1
Osteoporosis	1
Depression	1
Hypercholesterolaemia	1
Acne vulgaris	1
Haemorrhoids	1

4.6 Ethics statement

As no patients were directly involved in this study, there was no need for informed consent.

5. Results and discussion

5.1. Hypertension (11 reports)

Origin of the disorder

Most researchers noted that there are two types of hypertension in both medical systems. In Unani-Tibb, there is hypertension due to a sanguinous, or hot and moist, imbalance, accounting for the majority (~80%) of cases. There is also hypertension resulting from an imbalance in the cold and dry qualities; the so-called melancholic form, which accounts for the remainder. In conventional medicine, there is essential hypertension (80%-90% of cases), where the cause is unknown, and secondary hypertension, which is a consequence of an identified co-existing disease.

The researchers generally noted that In Unani-Tibb, the sanguinous form arises from an excess of blood in circulation, and the melancholic form from a hardening or stiffening of the arterial system. In Unani-Tibb, temperament was identified as an important factor playing a part, with those of a sanguinous or (to a lesser extent, phlegmatic) temperament more inclined to develop the main form of hypertension. Conversely, conventional medicine ascribes the rise in blood pressure to a rise in total peripheral resistance to blood flow, or to an increase in the patient's blood volume. The cause is considered to have genetic, environmental (esp. stress) and dietary components.

Non-pharmacological therapy

The researchers commented that Unani-Tibb has a wide range of non-pharmacological interventions, including lifestyle advice, aimed at reducing the hot and moist qualities associated with primary

hypertension. These are aimed at supporting the body's physis, or self-healing mechanisms, and restoring homeostasis. An advantage of these interventions is that they are patient-specific; that is, they take into account the hypertensive patients temperament. Conventional medicine is also committed to non-pharmacological activity, with advice aimed at decreasing the body's sodium ion load, minimising psychological stress, and taking appropriate measures to reduce body mass if excessive. These measures are generally not patient-specific.

Governing factors

Diet / food & drink. The researchers, without exception, pointed out that diet modification in the Unani-Tibb treatment of hypertension offers an acceptable, patient-friendly and realistic approach. This is helped by reference to specific diet charts. The net effects of dietary intervention are the reduction in sodium content and the decrease in excess body mass, leading to restoration of the person's optimum qualitative balance. The advice proffered is based on an increase in the consumption of high-fibre fruit and vegetables, and the avoidance of foods which could aggravate the underlying qualitative imbalance, such as white flour products and refined sugar items. Conventional medicine, on the other hand, advocates a decreased intake in salt and a diet which encourages a reduction in body mass, as a way of reducing blood volume and total peripheral resistance. Unani-Tibb explains the reduction in salt intake because of the hot and moist temperament of salt which would aggravate the hot and moist qualities associated with hypertension. Reduction in alcohol intake is recommended by both systems, the researchers noted, for different reasons. In Unani-Tibb, alcohol disturbs the qualitative imbalance, especially, heat, (which increases blood volume), whereas in conventional medicine it is a risk factor for both weight gain and stress.

Environmental air & breathing. None of the researchers were able to give any advice in this governing factor which is offered by proponents of conventional medicine. However, several mentioned the importance of patient access to fresh air, which influences the qualitative balance of moistness and heat, and avoiding environmental conditions which aggravate the balance between the aforementioned qualities. The importance of breathing exercises in the Unani-Tibb approach to reducing elevated blood pressure was mentioned by a number of researchers.

Movement & rest. Several researchers pointed out that this governing factor is involved in maintaining qualitative (im)balance, leading to an excess of sanguinous humour. In this regard, the benefit of regular light, repetitive, non-stressing physical exercise was recommended, together with appropriate short resting periods. Excessive exercise should be avoided. Conventional medicine, on the other hand, advocated exercise as a way of returning to or maintaining optimum body mass, although an adrenergic stimulus to lowering total peripheral resistance is a factor.

Emotional aspects. Conventional acknowledges the importance of reducing anxiety and stress, as these are established risk factors in the onset and maintenance of hypertension. Drugs, esp. anxiolytics and hypnotics, are often advocated for this. However, as several researchers indicated, Unani-Tibb advocates practical methods for reducing stress and negative emotions by various processes, such as

breathing exercises, hydrotherapy and relaxation therapies, as a means of restoring balance to the qualities, especially heat and moistness. Avoidance of extreme emotional situations is advocated for the same reason.

Sleep & wakefulness. No formal advice is proffered by conventional medicine for this lifestyle feature. Unani-Tibb, however, recommends methods for the promoting quality sleep hygiene, with the researchers specifying breathing exercises, sensible eating practice and light massage. A number of researchers commented that a reduction to the hot and moist qualities often result from appropriate sleep duration and quality.

Elimination & retention. Again, no formal advice is proffered by conventional medicine for this lifestyle feature. Unani-Tibb, however, attaches considerable importance to this governing factor, recommending cleansing of the colon (with purgatives), and wet cupping and blood letting (to decrease blood volume). An adequate water intake is also noted as part of general advice, so assisting the kidneys in maintaining good urine flow and toxin elimination.

5.2. Type 2 diabetes (10 reports)

Origin of the disorder

The researchers generally indicated that conventional medicine considers Type 2 diabetes as a disorder of insulin utilisation by the body, brought about by faulty receptor and other mechanisms. The condition is aggravated by metabolic factors and excessive body mass. Treatment revolves around weight loss where appropriate, or the use of oral hypoglycaemic drugs such as metformin. The researchers generally mentioned that, according to Unani-Tibb, diabetes Type 2 is a consequence of a hot and moist, to moist and hot, imbalance. Unani-Tibb also identifies people with specific temperamental type as more prone to the onset and progress of the disorder.

Non-pharmacological therapy

Conventional medicine does advocate weight loss for Type 2 diabetics, especially in the younger patients, by both physical exercise and diet. The intake of high glycaemic index complex carbohydrates is recommended. In contrast, Unani-Tibb offered a wide range of advice aimed at reducing the excess moistness associated with type 2 diabetes. This could ameliorate the condition, its symptoms and its consequences, both in the short- and the long-term.

Governing factors

Diet / food & drink. The researchers noted that conventional medicine usually advocates the use of diet as supplementary treatment in tandem with hypoglycaemic drug therapy. The incorporation of high glycaemic index carbohydrate is also recommended. Alcohol should be minimised, especially if the patient is prone to its abuse. Unani-Tibb, however, has a more rational, patient-specific, advice, in that food and drink should be selected from particular diet charts in order to avoid aggravating the underlying temperamental (phlegmatic) imbalance, especially in avoiding the progression to a cold and dry situation. Researchers suggested that hot and dry foods should account for ~60% of food intake, and cold and dry foods for the remaining 40% or so. The intake of oil, fat and white flour products, for

example, should be severely curtailed, and the consumption of high-fibre fruit and vegetables increased.

Environmental air & breathing. Conventional medicine has little to offer in this aspect of maintenance or support treatment. Unani-Tibb, as the researchers generally pointed out, affirms that fresh air and sound ventilation do contribute to the patients' self-regulatory healing mechanisms. Furthermore, the avoidance of humid and cold environments is recommended as a means of aggravating the moist qualitative imbalance. Breathing exercises were also identified by some researchers as a valuable adjunctive therapy.

Movement & rest. Physical exercise of appropriate intensity and duration is recommended, in conventional therapy, as a process leading to a fall in excess body mass. Unani-Tibb, as several researchers commented, goes further. Not only is a structured approach to regular rest periods suggested, but regular, patient-specific physical aerobic exercise for defined time periods is proposed, a way of redressing the qualitative imbalance.

Emotional aspects. Conventional medicine does support stress-relieving activities as adjunctive treatment. Unani-Tibb goes along with this, proposing that breathing exercises and physical activity programmes help in this regard.

Sleep & Wakefulness. Conventional medicine remains uncommitted on this particular aspect of a diabetic's lifestyle. Unani-Tibb asserts that good sleep, of appropriate duration, without daytime naps, should be considered, supporting the return to optimum qualitative balance. Excessive sleep, because of its effect in promoting the phlegmatic humour, should be avoided.

Elimination & Retention. Unani-Tibb, as the researchers observed, recommends cupping as a means of toxin removal, and the periodic cleansing of the digestive tract via purging. Scrupulous attention to hygiene, esp. of the foot, is advocated. Conventional medicine has no formal position in this aspect of therapy.

5.3. Bronchial asthma (9 reports).

Origin of the disorder

The researchers generally noted the different classification of bronchial asthma adopted by both conventional (intrinsic and extrinsic, or allergic) and Unani-Tibb (phlegmatic, melancholic and allergic) medical systems. Conventional medicine now considers bronchial asthma to be the result of hypersensitivity, from an underlying inflammatory process of the bronchial tree, whereas Unani-Tibb regards the disorder to be in most cases a phlegmatic imbalance, due to a moist and hot to cold and moist qualitative disturbance, and asthma arising from a response to allergens (which are associated with heat). There is also asthma arising from a cold and dry, or melancholic imbalance, occurring in the latter stages of the disorder.

Non-pharmacological therapy

Both systems have a number of non-pharmaceutical measures in common, as the researchers observed. These include avoiding exposure to allergens, by improving domestic and person hygiene,

(for example, taking care with physical activity in order not to provoke an attack), and subdue excessive emotions and anxiety. The elimination of certain foods from the diet is an option common to both in sensitive individuals.

Governing factors

Diet / food & drink. Unani-Tibb strongly suggests the avoidance of specific foods in order not to aggravate the underlying disorder, and the consumption of others so as to encourage the restoration of the normal qualitative state. For phlegmatic asthmatics, the researchers pointed out, hot and dry or cold and dry food and drink was proposed. Garlic and onion featured prominently here, with some advocating a typical Mediterranean diet. Coffee intake should be reduced, some noted. Dairy products were proscribed, together with fizzy drink and other cold items. However, those with melancholic asthma were advised to consume food with a predominantly moist quality. Melancholic asthmatics are advised to avoid cold and dry foods. Conventional medicine recommends avoidance of certain trigger foods, such as shellfish and strawberries, reduction in fatty foods intake, and supplementation with vitamins C and B₆.

Environmental air & breathing. Most researchers noted that Unani-Tibb advocates avoidance of cold and moist or humid weather environments, with plenty of fresh air, and the performance of gentle breathing exercises. Conventional medicine suggests avoidance of allergen-loaded situations and domestic pets, esp. cats, whose dander can provoke an asthmatic attack. A non-smoking environment should be the ideal, and water exercises performed where possible.

Movement & rest. Unani-Tibb suggests avoidance of strenuous exercise, although regular physical activity is recommended, at least twice daily, esp. after supper. Conventional medicine likewise suggests avoidance of strenuous exercise, as this can lead to exercise-induced asthma.

Emotional aspects. Conventional medicine suggests reduction in the anxiety provoking environment, and minimising the impact of domestic and occupational stressors. Unani-Tibb encourages the use of meditation and prayer.

Sleep & wakefulness. Unani-Tibb advocates a regular sleep of 7 to 8 hours for the phlegmatic asthmatic, avoiding daytime naps. Conventional medicine favours normal sleep, but stressing that the sleeping area should be cleaned of dust mites.

Elimination & retention. Unani-Tibb perceives a role for wet cupping in treating phlegmatic asthma. Other measures to reduce to preponderance of phlegmatic humour include sneezing and induced vomiting. For melancholic asthmatics, measures to promote a clean functional colon are advanced, with laxatives, enemas and purgatives mentioned. Dry cupping is also suggested. Conventional medicine is silent on the role of elimination and retention in bronchial asthma therapy.

5.4. Gastritis (4 reports)

Origin of the disorder

As the researchers indicated, Unani-Tibb regards gastritis as the range of symptoms from stomach inflammation resulting from an excess of the bilious humour in the abdominal area. That is, the disorder arises from an imbalance in the hot and dry qualities. In conventional medicine, gastritis refers generally to inflammation of the stomach lining. Both medical systems attribute the disorder as a result of various predisposing factors, including certain foods, either over-seasoned or spicy, the effect of certain drugs, obesity, the presence of bacterial or fungal micro-organisms, or alcohol. It can be erosive or non-erosive; acute or chronic.

Non-pharmacological therapy

The treatment of gastritis in Unani-Tibb centres on restoring harmony to the hot and dry qualitative imbalance, by paying particular attention to the governing factors. The temperament of the patient is important, in the opinion of most researchers, as treatment is patient specific. In this regard, dietary advice and toxin elimination feature prominently. In conventional medicine, apart from drug therapy (antacids, H₂ histamine receptor antagonists and proton pump inhibitors feature prominently) advice tends to revolve around avoidance measures.

Governing factors

Diet / food & drink. In conventional medicine, dietary measures are recommended to either help the patient lose weight, avoid alcoholic drinks and seasoned or spiced foods, and to eat small, frequent food portions. Dietary advice in Unani-Tibb is more extensive, as improper eating habits are regarded as an underlying cause of the disorder. The treatment frames involved, according to the researchers, are the hot and moist, moist and hot, and cold and moist. It embraces the intake of foods which help resolve the underlying qualitative imbalance, such as cold and moist (70% to 80%) and hot and moist (20% – 30%), such as soft and fleshy fruits and vegetables. Avoidance of hot and dry foods is suggested, including fried spicy meats, alcohol, caffeinated beverages, chocolate and a number of processed foods.

Environmental air & breathing. On environmental matters, conventional medicine has little to offer. However, as most researchers noted, Unani-Tibb suggests reduction in, and avoidance of, cigarette smoking, air conditioners, hot and dry climate, and exposure to direct sunshine. Certain breathing exercises are advocated. These contribute to restoring humoral imbalance.

Movement & rest. Again, conventional medicine has little to offer in this sphere. Unani-Tibb recommends avoiding strenuous exercise, excessive rest, and a temperament-based balance between light exercise and physical rest. These actions too contribute to restoring humoral imbalance.

Emotional aspects. Conventional medicine does recommend stress-reducing activities. Unani-Tibb, as researchers observed, advises on avoidance of strong emotions, Stress levels and anxiety should also be addressed. Moreover, eating at a reasonable pace in a calm, non-disruptive atmosphere is advised.

Sleep & wakefulness. Conventional medicine offers little in this regard. Unani-Tibb, the researchers contend, feel that lack of good quality sleep is a risk for gastritis, as it increases dryness. A minimum of 6 to 8 hours sleep is recommended for the patient.

Elimination & retention. Measures for cleansing the colon in order to remove any toxins are recommended by Unani-Tibb, possibly with the use of laxatives. An increased in fluid intake is advocated by both conventional medicine and Unani-Tibb.

5.5. HIV and Aids (3 reports)

Origin of the disorder

Unani-Tibb views this as a disorder which is greatly influenced by lifestyle. It adopts a targeted approach, bearing in mind the patient's temperament, as well as the signs and symptom which are indicative of whether these signs and symptoms are associated with the cold and moist or hot and dry qualitative frames. The role of Unani-Tibb was noted by the researchers as being two-fold; first, to boost the patient's immune system and self-healing mechanisms; second, to ameliorate the deleterious adverse reactions associated with the anti-retroviral drugs, and to the drugs used to deal with opportunistic infections. Conventional medicine views HIV and Aids as a disease spread predominantly by sexual contact or by mother to baby transmission; it relies heavily on anti-retroviral drugs to inhibit the replication and distribution of the offending virus.

Non-pharmacological therapy

Conventional medicine strongly advocates education of at-risk groups in the prevention of virus transmission. The use of condoms, avoidance of unsafe sexual practices and abstinence are other non-pharmacological measures recommended.

Governing factors

Diet / food & drink. According to the researchers, Unani-Tibb advocates a diet which is appropriate to the qualitative frame associated with the signs and symptoms of the patient. Conventional medicine supports the use of food supplements in order to redress nutritional deficiencies.

Environmental air & breathing. Unani-Tibb advises appropriate breathing exercises and exposure to the external environment, depending on the respective qualitative frames. Conventional medicine has no position on this lifestyle factor.

Movement & rest. Light, regular exercise is advised by Unani-Tibb, consistent with the patient's qualitative frame, stage of disease and age. Conventional medicine has no formal position on this lifestyle factor.

Emotional aspects. Unani-Tibb advocates breathing exercises, meditation and prayer as options in dealing with the emotional situation the HIV & Aids patient may encounter. Conventional medicine has no real position on this lifestyle factor.

Sleep & wakefulness. Unani-Tibb suggests regular, quality sleep of 6 to 8 hours nightly. Conventional medicine has no stated position on this lifestyle factor.

Elimination & retention. Unani-Tibb advocates adequate fluid intake, to assist toxin elimination. Dry cupping and massage could also be considered. Excessive elimination is to be avoided. Conventional medicine has no position on this lifestyle factor.

5.6. Other clinical disorders (1-2 reports each)

Acne vulgaris. This is viewed as an inflammatory disorder of the pilo-sebaceous glands by both conventional medicine and Unani-Tibb. Acne, however, has a complex aetiology in conventional medicine, with infection, skin changes and hormones laying a part. Unani-Tibb regards acne as a chronic, hot and dry, or bilious, qualitative imbalance arising from poor governing factor expression. There are dietary factors which are important in both onset and treatment. It also advocates modification of several of the governing factors. Diet is pre-eminent, with avoidance of a whole range of food items suggested – junk foods and saturated animal fats, for example. A clean breathing, low alcohol, smoke-free environment is also advocated, together with good sleep, reduced emotional tension and facial hygienic cleansing processes.

Depression. Conventional medicine now recognises the importance of tryptophan-containing foods in depression, as an adjunct to drug treatment. Unani-Tibb considers that each of the governing factors can contribute to ameliorating depression, a condition it considers to be due to a moist and hot/cold and moist qualitative imbalance. The aim is to introduce lifestyle changes which fall especially into the cold and dry, and the dry and hot treatment frame is optimum, not excessive, sleep duration is important, as is an adequate diet to oppose lack of appetite. The value of physical exercise is also acknowledged. Situations which aggravate the cold and moist qualitative balance should be avoided.

Haemorrhoids. These varicosities of the anal canal veins, prevalent in smokers, pregnant women and those who stand for long periods, are treated in conventional medicine by support hose, vasoconstrictor agents, a high fibre diet, and minimising alcoholic drink intake. Measures to prevent constipation are also taken, and extended bed rest may be advised. In Unani-Tibb, piles are considered to arise from excessive melancholic humour. Consequently, treatment frames include hot and moist, moist and hot, and cold and moist diet and activities in order to restore equilibrium. Activities or foods with cold and dry qualitative properties should be avoided. In addition, increased water intake and high bulking fibrous food are recommended. The patient should keep away from cold weather or environments. The emotional context should be addressed if necessary, by encouraging social activities, for example breathing exercises may help. Situations leading to worry or anxiety should be avoided. The patient should be reasonably active, in order to increase the heat quality. Elimination should be encouraged by dry cupping, colonic irrigation, laxatives, enemas and purgatives.

Hypercholesterolaemia. This was reviewed briefly. The conventional medical treatment relies heavily on drugs to inhibit the cholesterol synthetic pathway at one specific stage, plus the adoption of a low fat, low cholesterol, high fibre diet. In Unani-Tibb, this disorder is a cold and dry, or melancholic, qualitative imbalance, so therapy is based on restoring the balance with hot and dry or hot and moist foods. The heat generated by moderate physical exercise also contributes to restoration of a normal level.

Hyperthyroidism. In conventional medicine, hyperthyroidism arises from overactivity of the thyroid gland, usually due to a tumour. Treatment often involves surgical excision or antagonists to thyroid hormones. Unani-Tibb considers that hyperthyroidism results from a hot and dry qualitative imbalance. The researcher indicated a range of governing factor modifications which could help ameliorate the condition. These included increased dietary intake of specific raw soft fruits and high-fibre vegetables, regulation of the environment to reduce heat exposure, and the avoidance of stressful situations, possibly with breathing exercises, prayer and meditation. Sleep hygiene should be improved, with afternoon naps recommended, and light physical exercise undertaken. Conventional medicine accepts the need for some lifestyle changes, especially in the aspects of food, emotions and the environment.

Obesity. This phenomenon (the 'New World Syndrome') is now perceived as a chronic disorder, in which lifestyle (especially diet, eating behaviour and exercise) plays a prominent part. It is accepted as leading to other chronic disorders, such as diabetes Type 2 and hypertension. Basically, both conventional medicine and Unani-Tibb view the problem as a multifactorial disorder (genetics / temperament; diet; environment), with an imbalance between calories ingested and those expended leading to fat accumulation. Conventional medicine relies heavily on appetite suppressants, but does now accept the need for a rigorous, long-term change to lifestyle. It stresses the benefits of strict diet and moderate, regular exercise. Group counselling therapy may also be involved. Unani-Tibb views obesity as a phlegmatic disorder arising from poor metabolic functioning, combined with bad eating habits, such as an undisciplined intake of fried foods, white flour products and sweet items. The treatment of obesity in Unani-Tibb therefore revolves around changes to eating patterns, decreased calorie intake, and increasing the body's metabolism by exercise and preferring hot and dry foods. Strict dieting and robust food deprivation are not options. The treatment frames are identified as cold and dry, dry and hot, and hot and dry, so foods will be selected accordingly. Water intake is increased to avert hunger pangs, and alcohol intake minimised.

Osteoporosis. As the researcher noted, conventional medicine advocates a wide range of changes to a patient's lifestyle in order to deal with the progressive loss of bone tissue that usually accompanies ageing, esp. in females. Diet-wise, an increase in calcium containing foods, and a reduction in protein intake, caffeine-containing food and drink, and salt is advised. Sunlight is seen as beneficial (re Vitamin D), as is moderate, aerobic, low impact exercise. Smoking should be curtailed. From the Unani-Tibb perspective, osteoporosis is regarded as a cold and dry, or melancholic, qualitative imbalance. Changes to a person's lifestyle are therefore directed at redressing this imbalance. A range of activities include diet (fruit and vegetables, high fibre grains, and hot and moist meats). Caffeine-containing chocolate and drink should be avoided. Consideration is given to improving breathing, by breathing exercises and avoidance of cold and dry atmospheric conditions. Light, regular appropriate exercise is advocated, as is regular sleep, esp. after retiring early. Emotional excesses should be avoided, with relaxation exercises carried out.

Rheumatoid arthritis. Both researchers noted the difference between the conventional and Unani-Tibb origins of this disorder. The former describes it as a systemic inflammatory disease, acute or chronic, affecting predominantly the skeletal joints, but also other tissues and body organs. The latter system describes it as a common inflammatory disorder affecting a number of joints, arising from a hot and moist qualitative imbalance. In conventional medicine, non-pharmacological treatment revolves around an adequate diet from all food groups, plus protein, fish oil and vitamin supplements. Patients are advised counselling, especially relating to psychological support, steroid-associated body mass gain and physical exercise to avoid joint immobility. Unani-Tibb, on the other hand holds a central place for diet. The treatment frame consists of cold and moist, cold and dry and hot and dry foods, reduction in salt intake, high fibre foods (fruit and vegetables) and the avoidance of acidic foods, animal fats and caffeine-containing or alcoholic beverages. Extreme emotions should be avoided, and breathing exercises instituted to alleviate stress. The patient should get plenty of rest, but also carry out reasonable physical exercise to minimise joint stiffness. Access to fresh air is considered essential, and humid, wet environments shunned. At least 7 to 8 hours sleep nightly is suggested. The patient's colon should be kept clean, with the monthly use of laxatives and purgatives. Blood letting, emesis and cupping may be of value in therapy, as are massage and perspiration.

6. Perceived deficiencies of the study

The researcher had too many disorders to review, making it difficult to analyse in depth a relatively small number.

The study does not generate any quantitative data, so it is difficult to make a meaningful comparison on the relative impact of conventional medicine and Unani-Tibb on specific disorders of lifestyle.

7. Conclusions

The conclusions arrived at by the researchers can be briefly summarised as follows.

Conventional medicine is highly advanced in knowledge and understanding of the biochemical and physiological features of the body, and in the use of chemotherapeutic agents in dealing with the signs and symptoms of disease. Lifestyle advice may be proffered, but there appears to be a shortfall here, possibly due to the fact that training in this area is not a major feature of conventional medical education. Also, it is invariably of a generic nature, usually lacking enthusiasm, and rarely patient-specific. In most cases, the potential for patient benefit of lifestyle changes is largely minimised or ignored, with conventional doctors, for various reasons, preferring the 'quick fix' and adopting the 'pill-per-condition' attitude. Much needs to be done to overcome this, in the way of, for example, formal educational and public health programmes. A good example is the current approach to the HIV and Aids epidemic.

In Unani-Tibb, the governing factors are of prime importance in the therapeutic process. They are known to play a major role in the management of the chronic lifestyle disorders examined by the researchers. The humoral and temperamental theories allow for a comprehensive understanding of the rationale behind the lifestyle advice given for the respective diseases. This understanding provides for a targeted approach aimed at the qualities associated with the disorder. With this understanding the role of lifestyle is perceived as being important in helping prevent chronic disorders before they develop their full momentum. The objective of Unani-Tibb therapy is to restore balance to the humoral composition of the body in a patient-specific approach. Conventional medicine, by contrast, has as its objective the restoration of normality to distorted metabolic parameters. Also, the attitude of the 'quick fix' is alien to the Unani-Tibb philosophy, although amelioration of the patient's symptoms is of major importance. Advice to improve health by lifestyle changes is a natural and very affordable approach, relying on the personal responsibility of the patient. The researchers noted that there seems to be a strong correlation between the illness frames of the chronic disorders and the treatment frames adopted for the governing factors.

In terms of the impact the governing factors exert in maintaining health, diet is seen as the most important governing factor, so dietotherapy should always be considered when treatment is initiated. Elimination and retention are also perceived as being important factors, in line with the role of environmental toxins as being heavily involved in the onset and progression of most chronic diseases. Emotions also need to be regulated as these can exacerbate numerous disorders.

8. Further studies

Further studies should be initiated, several researchers noted. For example, what is the best way of encouraging the acceptance of lifestyle changes in everyday health maintenance? Also, how would it be possible to identify those who are more likely to benefit from such interventions? On a more strategic level, the researchers would like to investigate what changes need to be made to health policy and practice, and what are the roles of different healthcare practitioners? Finally, how this aspect of Unani-Tibb could be incorporated into integrative medicine is seen as an important research project. As Ibn Sina said: "Most illnesses arise solely from long-continued errors of diet and behaviour".

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UWC RESEARCH PROJECT REGISTRATION AND ETHICS CLEARANCE APPLICATION FORM

This application will be considered first by the UWC Faculty Board Research and Ethics Committees, then by the UWC Senate Research Committee, which may also consult outsiders on ethics questions, or consult the UWC ethics subcommittees, before registration of the project and clearance of the ethics.

No project should proceed before project registration and ethical clearance has been granted.

A. PARTICULARS OF INDIVIDUAL APPLICANT			
NAME: Rashid Ahmed Hassen Bhikha TITLE: Prof.			
DEPARTMENT: School of Natural Medicine FACULTY: Community & Health Sciences			
FIELD OF STUDY: Complementary Medicine			
ARE YOU:			
A member of UWC academic staff?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
A member of UWC support staff?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	
A registered UWC student?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	
From outside UWC, wishing to research at or with UWC?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	

B. PARTICULARS OF PROJECT	
PROJECT NUMBER: TO BE ALLOCATED BY THE SENATE RESEARCH COMMITTEE:	
EXPECTED COMPLETION DATE: November/December 2007	
PROJECT TITLE: To compare the approach of lifestyle changes to a number of clinical disorders as advised in orthodox and Unani-Tibb medicine.	
THREE KEY WORDS DESCRIBING PROJECT: Comparison; lifestyle; chronic disorders	

PURPOSE OF THE PROJECT: **Departmental research**

M-DEGREE:

D-DEGREE:

POST GRADUATE RESEARCH: Diploma in Unani-Tibb

C. PARTICULARS REGARDING PARTICULAR RESEARCHERS

	FAMILY NAME:	INITIALS:	TITLE:
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OTHER RESEARCH PROJECT LEADERS:	MANXIWA QUBUDA	F. T.	DR DR

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14. **Van Tonder, P.J**
15. **Xuma, Nomakhosi Sarah**

THESIS: STUDENT RESEARCHER: NOT APPLICABLE

THESIS: SUPERVISOR: NOT APPLICABLE

C. GENERAL INFORMATION

STUDY LEAVE TO BE TAKEN DURING PROECT (days): Not applicable

IS IT INTENDED THAT THE OUTCOME WILL BE SUBMITTED FOR PEER REVIEWED PUBLICATION?
YES NO

COMMENTS: DEPARTMENTAL CHAIRPERSON:

SIGNATURE OF THESIS STUDENT RESEARCHER – WHERE APPROPRIATE:

DATE

SIGNATURE OF THESIS SUPERVISOR – WHERE APPROPRIATE:

DATE

SIGNATURE OF PRINCIPAL RESEARCHER – WHERE APPROPRIATE:

DATE:

SIGNATURE OF DEPARTMENTAL CHAIRPERSON:

DATE:

NOTE: THESE SIGNATURES IMPLY AN UNDERTAKING *BY THE RESEARCHERS* TO CONDUCT THE RESEARCH ETHICALLY, AND AN UNDERTAKING BY THE THESIS SUPERVISOR (WHERE APPROPRIATE), AND THE DEPARTMENTAL CHAIRPERSON, TO MAINTAIN A RESPONSIBLE OVERSIGHT OVER THE ETHICAL CONDUCT OF THE RESEARCH.

E. DESCRIPTION OF PROJECT AND RESEARCH ETHICS STATEMENT

Please type below, or attach a typed document, usually between 500 and 5000 words, setting out the purpose and process of the research. Please include a clear research ethics statement. The onus is on the applicant to persuade UWC that the research will be conducted ethically. This will normally require evidence of an up to date research ethics literature search in the particular discipline; evidence of what the world standard ethical practice is, in the particular discipline; an explanation of how the proposed research is to be conducted ethically; a detailed justification of any proposed departure from world standard ethical practice; and a clear undertaking to conduct the research ethically. It may be useful also to agree to conduct the research in line with the published ethical rules of a national or international disciplinary association. UWC reserves the right to stop or suspend any research undertaken by its staff or students, or by outsiders on its property or in association with it, if the research appears to be unethical.

(SEE ATTACHED PROPOSAL)

Form issued by: Professor Renfrew Christie, UWC Dean of Research, February 2002.

(959 2949; 959 2948 secretary, 959 3170 fax, email: rchristie@uwc.ac.za)

UNIVERSITY OF THE WESTERN CAPE
Faculty of Community and Health Sciences

School of Natural Medicine

ABSTRACT
RESEARCH PROJECT

Keywords: Comparison; conventional medicine; Unani-Tibb therapy; chronic disorders; lifestyle (governing) factors

1. Introduction

The importance of lifestyle modification is now increasingly accepted as part of the treatment of a number of chronic disorders¹. The demand for a drug fix for every disorder, typical of the conventional medical approach, is slowly but surely giving way to the realisation that the avoidance or treatment of a number of chronic diseases – especially the so-called ‘diseases of affluence’ – lies squarely with the affected person’s lifestyle². Medical conditions such as hypertension, type 2 diabetes, osteoporosis and lipid disorders are known to respond positively to improvements in the patients’ diet, degree of exercise and general behaviour³.

This study is designed to compare the approaches of conventional medicine with Unani- Tibb therapy⁴ in treating with lifestyle modification a number of chronic clinical disorders. More specifically, it will examine the underlying logic of both the conventional and the Unani-Tibb advice for patients, in terms of the basic philosophy of either therapeutic system.

2. Aims and objectives of the study

2.1 Main objective

To compare the approach of lifestyle changes to a number of clinical disorders as advised in orthodox and Unani-Tibb medicine and to critically evaluate the similarities and/or differences between the two approaches as well as the rationale behind the advice given.

2.2. Literature search

A search of the medical literature will be conducted into each item of advice (diet, exercise, detox processes, emotional support, etc) for documented support for the specific advice.

The literature search will be undertaken via the electronic media (Google, MSN or other search engines) or at the local medical library.

2.3. Lifestyle advice reviewed

The lifestyle advice given by conventional doctors, and that given by Unani- Tibb practitioners, will be listed, described in detail, and explained in terms of the medical philosophy of each system.

3. Research methods and instruments

3.1. Study design

The clinical disorders to be reviewed in this study are listed below. Other disorders may be included at the supervisor's discretion.

Primary (essential) hypertension

Type 2 diabetes

HIV and AIDS

Bronchial asthma

Lipid disorders

Recurring headache

Gastritis

Each researcher will select at least four of the above disorders. A literature survey will be conducted on each of the four chosen disorders from a minimum of three medical references (either electronic searchers or printed text), for details from the orthodox perspective. The Unani-Tibb perspective of lifestyle for these conditions will be extracted from the modules of the Diploma programme. The literature pertaining to these disorders will be evaluated, specifically with regard to the nature of the advice given, and the rationale behind the advice given. For example, the reduction of salt intake for treating hypertension could be explained in terms of sodium retention, water accumulation and decreased kidney activity (conventional medicine); or by imbalances in the patient's Hot and Moist qualities (Unani-Tibb therapy). Interpretations of the commonalities/differences in the rationale and understanding between conventional medical thinking and the Unani- Tibb philosophical approach will then be highlighted and discussed.

3.2. Lifestyle / governing factor parameters

The following lifestyle / governing factors will be evaluated in the context of the advice given for each of the disorders listed above:

Diet: food and drink that are recommended.

Air and breathing: advice on climatic preferences and/or breathing exercises.

Exercise: types and duration of exercises recommended.

Emotions: advice on emotional management (counselling, yoga etc)

Sleep patterns: tendency towards insomnia, hours advised etc

Elimination: advice on promoting elimination i.e. high fibre diet, laxatives, sauna etc.

3.3. Timeframe for the study

The research project will take place over a *4 to 5 month* period.

3.4. Results

The results will be presented as individual project reports. The results from all reports will be merged as necessary to provide an overall report on the study.

4. Ethics statement

As no patients will be directly involved in this study, the need for discussion and informed consent falls away.

Further information / reading

1. Postgraduate Diploma in Unani-Tibb Modules 1 to 11. (2007), UWC
2. Progress Report. To assess the integration of governing (lifestyle) factors into the treatment of patients suffering from chronic illness conditions. (HIV and AIDS, Hypertension and Diabetes), UWC, 11 April 2006
3. R.Bhikha.4 Temperaments, 6 Lifestyle Factors. (2006). Ibn Sina Institute of Tibb, Johannesburg.
4. R.Bhikha & M.A.Haq. 2000. Tibb – Traditional Roots of Medicine in Modern Routes to Health. South Africa.