
Evaluating the impact of eliminating humoral imbalances

Authors: Prof Rashid A H Bhikha (research director), Dr Yumna Abrahams (research supervisor), Dr Anisha Allie (research co-supervisor), Dr Christo A Scheepers (clinic administrator), Dr Beatrice Mukarwego, Dr Fathima Osman, Dr Rushqua Salasa, Dr Mohammed Slarmie, Dr James Suteka, Dr Raeesa Hassen, Dr Ayesha Fakir (researchers).

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Compiled by: Prof R. Bhikha and Dr J. P. Glynn

Purpose of the study

Subsequent to the Interim Report that was completed in May 2016, and in keeping with the revised protocol, this report includes additional pathological tests such as C-reactive protein (CRP), Coagulation tests, Thyroid functions and full blood count on a few of the patients recruited from numbers 61-100. The outcomes of the research included an additional aspect from the previous five objectives: (a) Assess whether the presenting signs and symptoms/illness conditions are indicative of an excess/abnormal humour/s in the patient; (b) Assess whether the quality/ies associated with the presenting signs and symptoms/illness conditions, corroborates with the dominant quality of the temperament of the patient; (c) Assess the value of herbal infusions on its own or together with either/and/or medication/cupping/massage, in addressing/relieving the presenting signs and symptoms/illness conditions associated with the excess/abnormal humour/s; (d) Assess whether the treatment with herbal infusion has an impact in patients who are hypertensive, or have elevated cholesterol or blood glucose levels; (e) Assess the impact of the herbal infusions on CRP, Coagulations Tests (PT, INR, aPTT), thyroid functions and Full Blood Count; and (f) To establish the duration, dosage of the different herbal infusions, in the treatment of illness conditions associated with excess/abnormal humours.

Keywords: Herbal medicine – infusions - health & disease - humoral imbalance – temperament - disorders

Introduction

Herbal medicine has traditionally been adopted as a major form of treatment for illness conditions. It is now experiencing a major revival of interest in the light of greater understanding of our body's complex mechanisms and metabolism, in both health and disease. Together with the therapeutic benefits of a sound lifestyle, herbal remedies, make up a major form of Tibb treatment. Formulating individualised herbal infusions (or *teas*) as reliable and easy-to-use herbal remedies represent a step forward in the treatment of both acute and chronic disorders. In addition, if these infusions target specific humoral disharmonies linked to specific disorders, then substantial clinical benefit can be expected. This study was devised to test this hypothesis in the real world of South African clinics, in patients suffering from common illness conditions.

(For more information on Tibb theory, the rationale behind restoring abnormal/excess humours in treatment, as well as the composition of the infusions, refer to the revised research protocol attached - **Appendix 1**).

Study design

The research protocol was drawn up in May 2015, revised in July and November 2015, and once more in May 2016. The researchers are qualified Tibb practitioners, registered with the Allied Health Professions Council of South Africa (AHPCSA). The study was conducted in the Saartjie Baartman and Langa Tibb Clinics, Cape Town.

Patient selection. A total number of 100 patients were recruited into the study. All patients were administered the herbal infusions plus the eliminative medication: *Laxotab* and *Renotone*. When considered necessary, additional treatment in the form of cupping, massage and/or medication was also prescribed. One hundred (100) patients, predominantly female (76 of 100) and aged between 21 and 79 years, were assessed for temperament and humoral imbalances. The purpose and practicalities of the study were explained to each individually, and verbal consent obtained.

Exclusion criteria. Potential candidates who were seriously ill, who were pregnant, or whose temperament could not be evaluated with confidence,

Temperamental selection. Patients falling into the four different temperamental categories (sanguinous, phlegmatic, melancholic and bilious) were identified by random selection. The temperament (both dominant and sub-dominant) of each patient was assessed by the established Tibb procedure, together with the dominant quality associated with the temperament of the patient.

Clinical condition. Patients were included into the study based upon the presenting signs and symptoms related to clinical disorders with evident links to humoral imbalance or excess.

Study regimen. The herbal infusion, whether used for excess amounts or abnormal forms of the sanguinous, phlegmatic, melancholic or bilious humour, was based on the presenting symptoms and evident signs. Each infusion was directed at specific humours, based on Tibb's traditional experience. Every patient was requested to consume the specially prepared herbal infusion at specified times. The dosage range of ½ to 1 teaspoon, 2 – 3 times a day was determined according to the clinician's assessment, intuition and experience. Patients with dominant *cold* qualities (i.e., those of a phlegmatic or and melancholic disposition) drank the infusion while it was warm, whereas the patients with dominant *hot* qualities (i.e., sanguinous and bilious) drank the infusion after cooling. Cupping, massage and/or additional medication were administered to patients requiring more assertive treatment according to the practitioner's clinical judgment.

Elimination therapy. Together with the herbal infusions, *Laxotabs* and *Renotone* was prescribed for each patient, to encourage elimination via the bowel and kidney respectively.

Clinical assessment. Clinical assessment took into account the patient's signs and symptoms as well as recording the patient's blood pressure, cholesterol and glucose levels. In addition CRP, Coagulations Tests (PT, INR, aPTT), Thyroid functions and Full Blood Count tests were included for a few patients. All patients were assessed at every clinical opportunity and consultation.

Motivation. All follow-up treatment was provided at no cost to the patients, and no payment or reward was offered to participate in the study, or on termination.

Results

Of the 100 patients treated, success was achieved in 74 (74%) of the patients, partial success in 19 patients (19%) whereas treatment in 7 patient's (7%) was unsuccessful.

Also noted is that 55 of the 100 patients (55%) were treated with only herbal infusions, whereas the remainder were treated with infusions together with either/or medication, massage or cupping.

Presenting clinical signs and symptoms w.r.t. excess or abnormal humours. In all patients, the Tibb practitioners were able to identify the excess/abnormal humour/s from the presenting signs and symptoms.

Relationship between the qualities associated with the presenting signs and symptoms and the dominant quality of the temperament of the patient. With respect to this relationship the results show that of the 100 patients, in 54 patient's (54%) the qualities associated with the signs and symptoms was the same as that of the dominant quality associated with the temperament of the patient. This percentage increased in patients under the age of 40 to 74% (20/27), and up to 92% (11/12) in patients under the age of 30. The results also indicate that 56 out of 78, (72%) of the patients over the age of 40 presented with a Melancholic (Cold & Dry) imbalance.

Impact of herbal infusions in patients with either/or hypertension, diabetes and high cholesterol. Patients were only considered if the readings were above the following: HTN (BP > 130/90 mmHg), Diabetes (BG: Blood Glucose - random > 7 mg/mL), and Chol (> 5 mmol/L). The results on hypertension revealed that the blood pressure of 23 of the 25 patients was reduced, whereas in 2 patients the blood pressure increased. Of the 22 patients with hypercholesterolemia the cholesterol level decreased in 20 patients whereas in 2 patients there was a slight increase. With respect to patients with diabetes, of the 17 patients, the glucose levels decreased in 14 patients - this may not be a true reflection as it was random testing. The above patients selected were not on any medication for either of the conditions.

Impact of herbal infusions on metabolic parameters. On the *CrP* assay five of the six (83%) patients showed a decrease in the *CrP* levels. *Prothrombin Time (PT)*: of five patients, four (80%) showed a slight reduction, one increased. *International Normalized Ratio: (INR)*: improvement in one patient, virtually no change in the other five patients. *Activated Partial Thromboplastin Time (aPTT)*: of the six patients, four showed an increase whereas two showed reduction, *Thyroid functions (Free T4)*: of the six patients only three were repeated – all results were within the normal parameters for their age and sex. *Thyroid Stimulating Hormone (TSH)*: of the six patients, three were repeated with reduction in the 2nd reading (one patient's result was still out of normal range), of the remaining 3 only initial tests were done of which 1 was low. *Full Blood Count (FBC)*: of the six patients, the before and after results in three patients were within normal range; of the remaining three the first results were high whereas the second results were within range.

Discussion

The study was designed to answer the following questions:

(a) Do the presenting signs and symptoms of the disorders indicate excess/abnormal humours?

As all clinical disorders arise from excessive or abnormal humours manifesting in signs and symptoms, this was identified with ease, given the experience of the Tibb doctors.

(b) Do the qualities of the presenting signs and symptoms corroborate with the dominant quality of the temperament?

Of the 100 patients, 55% showed a link between the dominant quality of the temperament in the context of the signs and symptoms of the illness conditions having the same quality. This percentage increases to 74% in patients below the age of 40, and more significantly, increases to 92% in those below the age of 30. This clearly indicates that the predisposition to illness is closely aligned to the dominant quality of the temperament - especially in the early life during which physis functions optimally. Obviously with age the ability of physis to restore homeostasis weakens, resulting in the accumulation of not only excess but also abnormal humours.

Confirmation of this hypothesis has important implications for health promotion and wellness maintenance. Being aware of the dominant quality associated with an individual's dominant/sub-dominant temperament allows for appropriate management of the Six Lifestyle Factors to avoid excess of the dominant quality - thus ensuring optimum health.

(c) What is the benefit of herbal infusions, alone or combined with other therapeutic options, in relieving the signs and symptoms of disorders linked to humoral abnormality or excess?

Of the 100 patients treated, success was achieved in 74 (74%), partial success in 19 patients (19%), whereas treatment in only seven patient (7%) was unsuccessful. The results indicate the effectiveness of the infusions, especially as 55 (55%) patients were only treated with herbal infusions.

(d) What is the effect of herbal infusion in patients who are hypertensive or exhibit raised blood cholesterol or glucose?

The results on patients (from 61-100) show a similar trend as the previous results (patients 29-60). Interestingly, all four infusions had a positive impact on reducing elevated blood pressure, cholesterol and blood glucose levels. The question arises as to how each of the different infusions had an impact on blood pressure, cholesterol and blood glucose levels? The only conclusion that we can come to is that all illnesses begin when there is an imbalance at a humoral level, as hypothesised by the founders of medicine Hippocrates, Galen and Ibn Sina. As humours exist at both the physical and meta-physical levels and therefore at a cellular and sub-cellular level, restoring humoral imbalances should be the primary objective in treatment. This approach addresses not only the symptoms but also the cause/s of the illness conditions.

e) What is the impact of the herbal infusions on pathological tests such as CrP, coagulation tests, Thyroid functions and FBC?

Due to financial and logistical constraints only 5-6 patients were assessed for the above tests, making extrapolation of these results inconclusive. A new research protocol will have to be designed to assess the impact of herbal infusions on the above pathological tests.

(f) What are the pharmacokinetic parameters of the different herbal infusions?

This pilot study does not reveal the duration and dosage, which will no doubt vary from patient to patient. Regarding onset of action, the results suggest that relief from symptoms and general improvement were in most cases within a few days of treatment onset.

Conclusion

This pilot study demonstrates the value of herbal infusions either on their own, or with cupping, massage and/or medication in the management and treatment of a range of common illness conditions which are the consequence of excess/abnormal humour/s. Specifically, the impact of the infusions on reducing the signs of hypertension, cholesterol and blood glucose has also been further substantiated with the increase in the patient cohort later in the study. The success of the study also confirms that humours exist at both a cellular and sub-cellular level. With respect to assessing the impact of the herbal infusions on certain pathological tests, further studies should be considered based on a new research protocol within financial and logistic constraints, as well as suitable patient availability.

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Appendices

Appendix 1: Revised Research Protocol (Revision 3)

Appendix 2: Summary of Results

Research Protocol: Evaluating the impact of eliminating humoral imbalances (Revision 3)

Researchers:

Dr Beatrice Mukarwego, Dr Fathima Osman, Dr Rushqua Salasa, Dr Mohammed Slarmie, Dr James Suteka, Dr Raeesah Hassan, Dr Ayesha Fakir
(*Tibb Practitioners*)

Research Supervisor:

Dr Yumna Abrahams (*Clinical Research Manager / Tibb Practitioner*)

Research Co-Supervisor:

Dr Anisha Allie (*Senior Doctor / Tibb Practitioner*)

Research Coordinator:

Christo A. Scheepers (*Clinic Administrator*)

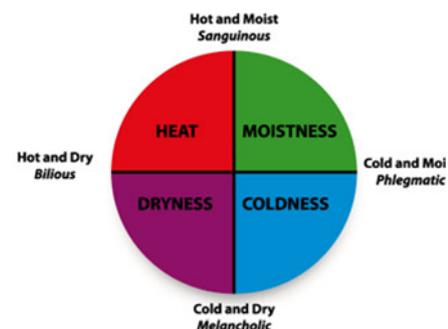
Research Director:

Prof Rashid Bhikha (*Chairman: Ibn Sina Institute of Tibb / Honorary Professor: Hamdard University*)

1. INTRODUCTION

The Ibn Sina Institute of Tibb is conducting the above research at the Tibb Medical Centre (Saartjie Baartman Centre) and the Tibb Medical Centre (Langa Clinic) in Cape Town which commenced in May 2015. The researchers are qualified Tibb Practitioners registered with the Allied Health Professions Council of South Africa (AHPCSA).

Tibb philosophy is based on the temperamental and humoral theory. In order to maintain health each individual has their own unique humoral composition in relation to their unique temperamental combination. Associated with each of the humours are qualities of heat, coldness, moistness and dryness which results in every person having a unique humoral composition with an ideal combination of qualities with one quality being dominant. For example an individual with a sanguinous/phlegmatic temperament will have a dominant quality of moistness (see chart). Changes to this unique humoral composition, occurs from the influence of the Tibb lifestyle factors which include food and drink, environmental air and breathing, exercise and rest, sleep, emotions and eliminations of toxins – with the greatest influence being from food and drink. This change to the humoral composition will most likely occur from excess or abnormal states of their dominant humour. However, humoral changes can also occur from an increase into other humours. This change to the ideal humoral balance leads to pathological processes resulting in illness conditions.



Changes to this ideal humoral composition occurs from the qualitative effect of Lifestyle Factors which physis (the body's inherent wisdom) endeavours to restore homeostasis. Changes beyond the ability of physis to restore homeostasis results in pathological processes leading to signs and symptoms, associated with various illness conditions/systems of the body – all resulting from an excess/abnormal states of a particular humour.

The aim of the research is to assess the impact of eliminating the excess/abnormal humours associated with the different signs and symptoms/illness conditions. Listed below is a summary of the four different humours, the signs and symptoms associated with an excess of each humour.

1.1 Sanguinous humour

- The Sanguinous humour is produced mostly from Hot & Moist foods, the excess of which will result in an overabundance of the Sanguinous humour.
- People with Sanguinous dominant/sub-dominant temperament are predisposed to illness conditions resulting from an excess of the Sanguinous humour.
- Accumulation sites for sanguinous humour: heart, arteries, blood vessels, small capillaries, tissues and organs: liver and portal system, spleen and pancreas, the veins, uterus, kidneys, the skin, digestive system, respiratory and genitourinary mucosa.

1.1.1 Signs and symptoms:

1.1.2 Nosebleeds, gingivitis, high blood pressure, headaches – temple region;

1.1.3 Flushed complexion, angiomas, eczema, spider neavi;

1.1.4 Fullness and heaviness of the body, behind the eyes, drowsy, sleepy, weak, heavy limbs;

1.1.5 Sluggish, congested liver;

1.1.6 Uti, thick yellow urine.

1.2 Phlegmatic humour

- The phlegmatic humour is produced mostly from Cold & Moist foods, the excess of which will result in an overabundance of the Phlegmatic humour.
- People with Phlegmatic dominant/sub-dominant temperament are predisposed to illness conditions resulting from an excess of the Phlegmatic humour.
- Accumulation sites: stomach, upper respiratory tract. From the stomach the Phlegmatic humour finds its way via the gastro pulmonary reflex, into the chest, lungs, throat, nose and sinuses. It presents as congestion making the head and brain feel stuffy. Phlegm congestion in the lungs and chest will cause congestion and stagnation in the lymphatic system. Excess Phlegmatic humour can affect any part of the body.

1.2.1 Signs and symptoms:

1.2.2 Heaviness, lethargy, sleepiness, mental dullness, swollen, puffy eyelids, moistness, frontal headaches;

1.2.3 Runny nose, congested nose, nasal discharges, post nasal drip, sinus congestion, productive cough (clear/white), colds, flu, lung congestion, thick tongue, pale lips;

1.2.4 Indigestion, weak digestion, sluggishness and drowsiness after meals;

1.2.5 Skin pale, white complexion, cold, clammy skin, weeping, oozing skin conditions, poor muscle tone;

1.2.6 Swollen, tender glands, cellulite, congestion of lymph;

1.2.7 Pale thick urine, leucorrhoea, amenorrhoea;

1.2.8 Slow, deep, soft pulse.

1.3 Bilious humour

- The Bilious humour is produced mostly from Hot & Dry foods, the excess of which will result in an overabundance of the Bilious humour.
- People with Bilious dominant/sub-dominant temperament are predisposed to illness conditions resulting from an excess of the Bilious humour.
- Accumulation site is the gall bladder from where it spills into the intestine in fat metabolism. The Hot & Dry qualities of the Bilious humour results in the signs and symptoms below.

1.3.1 Signs and symptoms:

1.3.2 Anger, impatient, irritability, forceful, agitated, stress, insomnia, restless;

1.3.3 Migraines, unilateral headache, sore, red bloodshot eyes, itchy, jaundice (yellow), nosebleeds, dryness;

1.3.4 Oral ulcerations, inflamed, yellow coat on tongue, bitter taste in the mouth, excessive thirst;

1.3.5 Jaundice, fatty liver, hepatitis, hepatomegaly, gallstones, cholecystitis, constipation;

1.3.6 Intolerant to greasy, fatty, fried foods. Stomach hyperacidity, acid reflux, gastric/duodenal ulcers, nausea, vomiting yellow/green bile, burning stools;

1.3.7 Red sensitive skin, hives, rashes, yellow/jaundiced;

1.3.8 Inflammatory conditions;

1.3.9 Burning urine, dark colour, rusty;

1.3.10 Full rapid bounding pulse.

1.4 Melancholic Humour

- The Melancholic humour is produced mostly from Cold & Dry foods, the excess of which will result in an overabundance of the Melancholic humour.
- People with Melancholic dominant/sub-dominant temperament are predisposed to illness conditions resulting from an excess of the Melancholic humour.
- Accumulation sites: builds up in the spleen and from there it spills over into the stomach and/or large intestine causing digestive complaints such as indigestion, flatulence, distention, bloating, colic and constipation. From the digestive tract it moves to other tissues and organs in the body.
- From the stomach, duodenum and small intestine, Melancholic humour congests the gallbladder and hepatic portal system, and the liver moving into the chest, throat and upper stomach areas.
- From the colon, Melancholic humour penetrates into the bones and joints of the sacrum, lower back and pelvic girdle, bringing degenerative arthritic changes to areas before affecting the entire or other areas of the musculoskeletal system.

1.4.1 Signs and symptoms:

1.4.2 Nervousness, anxiety, moodiness, lonely, alienated, cynical, fearful, headaches – occipital;

1.4.3 Spaciness, vertigo, light headedness, nervous exhaustion, insomnia, tinnitus;

1.4.4 Constricted breathing, pain, fullness;

1.4.5 Hepatomegaly and splenomegaly, portal congestion;

1.4.6 Irregular, nervous eating and food cravings, anorexia, poor appetite, stomach discomfort, flatulence, colic, intestinal obstruction, bloating, constipation;

1.4.7 Poor blood circulation, cold hands and feet, clot forming, emboli, dark thick blood;

1.4.8 Cold, dry rough skin, dark, cracked skin;

1.4.9 Arthritis, rheumatism, neuromuscular complaints, stiffness, aching, sciatica, numbness in extremities, tremors, tics, cramps, spasms;

1.4.10 Nervous sexual dysfunction;

1.4.11 Irregular menses, dysmenorrhoea with painful spasms, food cravings, clotting thick flow, scanty, insufficient lactation;

1.4.12 Thin clear urine;

1.4.13 Weak pulse.

2. HYPOTHESIS

Restoring homeostasis by eliminating the excess/abnormal humours will assist physis in reversing the pathological processes, at a cellular/sub-cellular level and in doing so will not only address the signs and symptoms, but also the cause/s of the various signs and symptoms/illness conditions – assisting physis in restoring homeostasis.

3. AIM OF THE RESEARCH

The aim of the research is to assess the impact of eliminating excess/abnormal humoral imbalances with herbal infusions.

4. SIGNIFICANCE OF THE STUDY

Targeting the elimination of excess/abnormal humours responsible for the pathological processes will assist physis in addressing the signs and symptoms of the illness conditions. This approach is in keeping with the Tibb philosophy of the maintenance/restoration of health where therapeutic intervention is aimed at addressing the causes and not the symptoms. The success of this study will be beneficial to Tibb Practitioners in treatment protocols that restore homeostasis by eliminating excess/abnormal humours which will most likely address signs and symptoms across various systems of the body associated with the excess/abnormal humour. This approach should improve the recovery time, and also have an impact on reducing treatment cost, with an improved quality of life.

5. RESEARCH OBJECTIVES

- Assess whether the presenting signs and symptoms/illness conditions is indicative of the excess/abnormal humour in the patient;
- Assess whether the presenting signs and symptoms/illness conditions, corroborates with the dominant quality of the temperament of the patient;
- Assess the value of herbal infusions in addressing/relieving the presenting signs and symptoms/illness conditions associated with the excess/abnormal humour;
- Assess whether the treatment with herbal infusion will have an impact in patients who are hypertensive, diabetics and those with high cholesterol;
- Assess whether the herbal infusions will have an impact on Coagulation Tests, (PTT, INR), Thyroid functions, (TSH, T4) Full Blood count and Platelets, C-Reactive Protein, parameters, in appropriate patients; and
- To establish the duration, dosage of the different herbal infusions, in the treatment of the illness conditions associated with the different excess/abnormal humours.

6. RESEARCH QUESTIONS

- Are the presenting signs and symptoms/illness conditions indicative of an excess/abnormal humour in the patient?
- Does the presenting signs and symptoms/illness conditions corroborate with the dominant quality of the temperament of the patient?
- What is the impact of prescribing herbal infusions in addressing/relieving the presenting signs and symptoms/illness conditions associated with the excess/abnormal humour?
- What is the impact of the herbal infusion in patients who are hypertensive, diabetics and those with high cholesterol;
- What is the impact of the herbal infusions on Coagulation Tests, (PTT, INR), Thyroid functions, (TSH, T4) Full Blood count and Platelets, C-Reactive Protein, parameters, in appropriate patients; and
- What is the duration, dosage of the different herbal infusions in the treatment of the illness conditions associated with the different excess/abnormal humours?

7. RESEARCH METHODOLOGY

Clinical trial research will be conducted by trained and registered Tibb Practitioners within the Tibb Medical Centres on patients that are attending the Tibb clinics for consultations and their progress will be monitored until September 2016.

Most illness conditions, especially chronic conditions should manifest itself in individuals having similar qualities to the dominant/sub-dominant quality associated with the temperamental combinations – especially at the initial stages. Treatment in these patients will target the excess/abnormal humour and quality/ies, associated with the illness condition and/or the temperamental combination.

In patients with long standing chronic conditions that have deteriorated (i.e. rheumatoid arthritis that has deteriorated from the initial inflammation [Hot & Moist] to the nodular [Cold & Dry] stage), the appropriate excess/abnormal humour/quality will have to be identified and targeted.

The treatment protocol is based on the prescribing of herbal infusions aimed at the excess/abnormal humour and when necessary, medication, massage and/or cupping is included.

7.1 Sampling

Random sampling will be used to identify patients that fall in the four different categories based on temperament, namely Sanguinous, Bilius, Melancholic and Phlegmatic. Random selection needs to ensure that patient's temperament (dominant/sub-dominant) is accurately evaluated, the clinical consultation, presenting signs and symptoms, and the humoral imbalance (excess/abnormal) is effectively identified.

7.2 Sample Size

A total number of 100 patients will be included in the study, with every patient being prescribed with the appropriate infusion and eliminatives (Laxotabs and Rentone). At the discretion of the practitioner additional medication, massage and/or cupping can be included in the treatment protocol.

7.3 Exclusion Criteria

Certain patients will be excluded based on certain criteria, for example:

- Pregnant patients;
- Patients where clear temperament evaluations are impossible;
- Patient who are seriously ill as they should not be compromised.

7.5 Verification

In conditions where baseline blood samples are necessary, samples will be sent to Pathcare for blood testing on commencement of the research and again on completion of the research for scientific verification of the results.

8. PROTOCOLS TO BE USED

8.1 Protocol Sequence

- Recruiting patients into the study – this is done as per the inclusion criteria which requires a successful identification of the dominant/sub-dominant temperament of the patient. Once this is done, the patient can be informed of the research and enquire as to whether they would like to participate. Also informing them that they will not be charged for the follow up consultation/s – during the research.
- After complete history taking and having identified the excess/abnormal humour, quality/ies associated with the signs and symptoms/illness conditions the appropriate protocol will be prescribed – herbal infusion, Laxotabs, Renotone and if necessary additional medication, massage and/or cupping.
- Lifestyle Factors needs to be evaluated so as to determine the possible cause/s of the imbalance humours/qualities.
- The period/duration of the signs and symptoms also needs to be recorded.
- After 3-5 days, the patient will be assessed – noting all the signs and symptoms and evaluating whether progress has been made or not.
- Patient must be re-evaluated after 3-7 days and if necessary a fourth/fifth visit 3-7days later.
- The research should be concluded after the fifth visit. However the research can be continued after consultation with the research supervisor.

8.2 Herbal Infusion

The herbal infusions to be used are the following:

Concoctive for Sanguinous humour	Concoctive for Bilious Humour	Concoctive for Melancholic Humour	Concoctive for Phlegmatic Humour
10g Althea officinalis	10g Cichorium intybus (Chicory)	15g Achillea millefolium (Yarrow)	15g Lavandula officinalis (Lavender)
10g Artica lappa	10g Foeniculum vulgare (Fennel)	15g Agrimonia eupatoria (Agrimony)	15g Ocimum basilicum (Basil)
10g Arctostaphylos uva-ursi	10g Silybum marianum (Milk Thistle)	10g Apium graveolens (Dill seed)	15g Trigonella foenum-graecum (Fenugreek)
5g Aspalathus linearis	5g Berberis vulgaris (Barberry)	10g Berberis Vulgaris (Barberry)	5g Carum Carvi (Caraway)
5g Borago officinalis	5g Mentha Arvensis (Wild mint)	10g Glycyrrhiza glabra (Liquorice)	5g Cinnamomum cassia (Cinnamon)
5g Camellia sinensis	5g Rheumemodi (Himalayan rhubarb)	5g Cassia angustifolia (Senna)	5g Zingiber officinale (Ginger)
5g Crataegus oxycantha			

The infusions will be given in dosages of ½ to 1 teaspoon depending on the practitioner's clinical findings.

Melancholics and Phlegmatics patients will allow the tea to simmer for 15 minutes and then drink it.

Sanguinous and Bilious patients will allow the infusion to cool after boiling and then drink.

9.3 Patient Needs

Any patient needing a more aggressive treatment approach, depending on the practitioner's clinical findings, will be given extra herbal medication.

10. ETHICAL CONSIDERATIONS

For this research to be conducted ethically, certain ethical considerations will be put in place, namely:

- Ensuring all participants have given informed consent to participate in the research – with the understanding that they can be excluded from the research at any time upon their request;
- Ensuring no harm comes to the patient by putting the patient health and wellbeing above the research being conducted, always ensuring that any treatment will be in the best interest of the patient;
- Ensuring only qualified and legally registered practitioners conduct the research; and
- Ensuring anonymity and confidentiality to the patients.

11. CONCLUSION

The research will commence on 10 May 2015 – 30 September 2016.

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Revised: 02nd July 2015

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Revised: 10th May 2016

Results: September 2016 - Appendix 2

Case Study No	Patient Initials, Sex, Age	Temp	S & S = dom. Quality of temp	Diag	Humoral Imbalance	Treatment protocol	Period Days / Consults	Outcome	Comments
1	F.S. (F), 29	Sang/Phleg	Yes	Upper Resp inf	Phleg	Phleg Inf, Lax, Reno	14 days - 5 consults	Successful	Px defaulted - symptoms returned (3rd consult) continued treatment - symptoms resolved.
2	M.D. (M), 58	Sang/Phleg	No	Gastritis, Ulcers	Bil	Bil Inf, Lax, Reno	6 days - 2 consults	Successful	Symptoms resolved.
3	R.B. (F), 28	Mel/Phleg	Yes	Nerve entrapment	Mel	Mel Inf, Lax, Reno	9 days - 3 consults	Successful	Symptoms resolved.
4	A. (F), 33	Phleg/Sang	Yes	Upper Resp inf	Phleg	Phleg Inf	7 days (3+4) - 5 consults (3+2)	Successful	Px received treatment twice for similar symptoms (2/2 - 5/2/15; 3/9 - 7/9/15) symptoms resolved both times.
5	R.A. (F), 65	Sang/Phleg	Yes	Influenza, Urinary Incontinence	Phleg	Phleg Inf, Lax, Reno, Flu Relief, Blackseed Rub	34 days 4 consults	Successful	Symptoms resolved. No incontinence, even when coughing
6	S.C. (F), 66	Sang/Phleg	No	Arthritis, HTN (140/90)	Mel/Sang	Mel Inf, Lax, Rumaflam, Rumamix, Dry cupping	65 days - 4 consults	Successful	Symptoms resolved (shoulder/lower back pain). HTN decreased (126/79).
7	A.A. (F), 57	Sang/Phleg	Yes	Bell's Palsy	Phleg	Phleg Inf, Lax	13 days 3 consults	Successful	Symptoms resolved.
8	A.X. (F), 44	Sang/Phleg	No	Arthritis	Mel	Mel Inf	18 days - 4 consults	Successful	Symptoms resolved.
9	T. (F), 52	Sang/Phleg	No	Arthritis, Sciatica	Mel	Mel Inf, Dry cupping	7 days - 2 consults	Successful	Symptoms resolved.
10	F. (F), 60	Sang/Phleg	Yes	Upper Resp inf, Sinusitis	Phleg	Phleg Inf, Lax, Reno	7 days - 3 consults	Successful	Symptoms resolved.
11	Z.P. (F), 36	Phleg/Sang	Yes	Swollen eyelid, Constipation	Phleg/Mel	Phleg Inf, Lax	7 days - 3 consults	Successful	Symptoms resolved.
12	X. (F), 36	Bil/Sang	Yes	Xerostomia, Oral Thrush, Constipation, Stress & Anxiety, Hormonal Imbalance	Bil/Mel/Phleg	Bil Inf, Stress Away, Gastrone, Gumtone, Dry Cupping	11 days - 4 consults	Successful	Symptoms resolved.
13	F. (F), 58	Sang/Bil	Yes	Sciatica, Arthritis, Panic attacks, Stress, UTI	Bil/Mel/Sang	Bil Inf, Antiflam, Tissue Salt No. 8, Dry cupping	16 days - 3 consults	Successful	Symptoms resolved; no panic attacks.
14	B.D. (M), 58	Sang/Bil	Yes	Gastritis, Ulcers, Indigestion, Myositis	Mel/Bil	Mel Inf, (Gaviscon used by patient), Bil Inf, Lax, Reno, Dry cupping	8 days - 4 consults	Successful	Symptoms resolved.
15	S.C. (F), 70	Sang/Phleg	No	Arthritis, HTN (118/60), Constipation	Mel	Mel Inf, Lax, Reno	12 days - 3 consults	Successful	Symptoms settled and resolved. HTN improved (120/80).
16	A.E. (F), 64	Mel/Phleg	Yes	Arthritis, Influenza, Chol (>7.99), HTN (136/80)	Mel/Bil/Phleg	Mel Inf, Lax, Reno, Bil Inf, Phleg Inf	137 days - 26 consults	Successful	Different signs and symptoms treated with different infusions which improved, Chol reduced (5.83), HTN improved (120/80).

17	G.P. (F), 37	Phleg/Mel	Yes	Influenza	Phleg	Phleg Inf, Lax, Reno	6 days - 3 consults	Successful	Symptoms resolved.
18	E.N. (F), 70	Phleg/Mel	Yes	Arthritis, Abdominal cramps, Constipation, Flatulence	Mel	Mel Inf, Lax, Reno, Dry cupping (Patient uses Tramadol)	14 days - 3 consults	Successful	Symptoms resolved, back pain alleviated.
19	M.V. (F), 40	Sang/Bil	No	Arthraiga, Constipation, Stress	Mel/Bil	Mel Inf, Lax	9 days - 3 consults	Successful	Symptoms resolved, pain improved.
20	V. (F), 55	Sang/Phleg	No	Arthritis	Mel	Mel Inf	7 days - 3 consults	Part. Suc	Pain in knee resolved, but crepitus still present.
21	D. (F), 22	Mel/Bil	Yes	Arthritis	Mel	Mel Inf	2 days - 2 consults	Part. Suc	Pain resolved, but crepitus still present.
22	M.L. (F), 44	Sang/Phleg	No	Arthritis, Myositis	Mel	Mel Inf	113 days 4 consults	Successful	Symptoms resolved.
23	H.T. (F), 35	Phleg/Sang	Yes	Parasthesia, Peripheral Neuropathy	Phleg	Phleg Inf, Lax, Reno	10 days - 3 consults	Successful	Symptoms resolved.
24	G. (F), 50	Sang/Phleg	No	Fibromyagia, Insomnia, Chol (7.03)	Mel	Mel Inf, Blackseed Rub, Bil Inf, Dry cupping, Wet cupping	33 days- 5 consults	Part. Suc	Pain relieved, Chol reduced (5.17), Insomnia persisted.
25	C.M. (F), 40	Bil/Sang	Yes	Gastritis, Ulcers, Stress & Anxiety	Bil	Bil Inf, Gastrone, Alsaorex	11 days - 4 consults	Successful	Symptoms resolved after medication added.
26	L.N. (M), 35	Sang/Phleg	No	Sciatica	Mel	Mel Inf, Lax, Reno, Dry cupping	6 days - 3 consults	Uns	Slight pain relief, but patient felt Inf not strong enough
27	F.S. (F), 67	Sang/Phleg	No	Arthritis, Fibromyalgia, Grieving, Insomnia, HTN (150/90)	Mel/Sang	Mel Inf, Lax, Reno, Rumaflam, Blackseed Rub, Stress-away, Dry cupping	8 days - 3 consults	Uns	Symptoms worsened. HTN unchanged (150/90)
28	W.D. (F), 67	Phleg/Sang	No	Arthritis, Heel spur	Mel	Mel Inf, Lax, Reno, Dry cupping	9 days - 4 consults	Uns	Symptoms unresolved, referred: querie structural deformity.
29	G.T. (F), 54	Phleg/Mel	No	Gastritis, HTN (134/90), Diab (BG: 9)	Bil/Sang	Bil Inf, Lax, Reno	18 days - 5 consults	Successful	Gastritis symptoms resolved, HTN: 110/70 improved, BG: 6.7 improved.
30	A.W. (F), 67	Phleg/Sang	Yes	Sciatica, Neuralgia, Neuropathy, Diab (BG: 10)	Mel/Sang	Mel Inf, Lax, Reno, Phleg Inf, Cupping	58 days - 6 consults	Part. Suc	Sciatica not resolved, Right leg burning sensation reduced. Left leg numbness reduced. BG reduced (8.2).
31	M.C. (F), 67	Sang/Phleg	No	Chol (>7.9), Arthritis	Mel	Mel Inf, Lax, Reno, Dry Cupping	28 days - 5 consults	Successful	Arthritis symptoms resolved, Chol reduced (5.99).
32	N.D. (F), 27	Sang/Phleg	Yes	UTI, Arthritis, Gastritis	Sang/Bil	Sang Inf, Lax, Reno, Mel Inf	8 days 3 consults	Successful	Symptoms resolved.
33	P.D. (F), 50	Phleg/Sang	Yes	UTI, HTN (170/104), Chol (5.6)	Sang/Mel	Sang Inf, Lax, Reno	10 days - 4 consults	Part. Suc	Uti resolved, Chol reduced (4.17), HTN increased (190/100) - maybe from Sang Inf.
34	J.M. (F), 60	Sang/Phleg	No	UTI, Sciatica, Arthritis	Phleg/Mel	Phleg Inf, Lax, Reno	11 days - 3 consults	Successful	Symptoms resolved.
35	A.I. (F), 57	Mel/Phleg	Yes	Arthritis, Constipation, Chol (7.47), Hot flushes, Incontinence, Influenza, Stress	Mel/Bil/Phleg	Mel Inf, Lax, Reno, Bil Inf, Phleg Inf, Dry Cupping.	70 days - 7 consults	Successful	Different signs and symptoms improved with different infusions, Chol reduced (5.09)
36	Y.M. (F), 29	Sang/Phleg	Yes	Headaches, Poor Sleep	Phleg	Phleg Inf, Lax, Reno.	6 days - 2 consults	Successful	Symptoms resolved.
37	R.K. (F), 43	Sang/Bil	Yes	Gastritis, GORD, Chol (5.63)	Bil/Mel	Sang Inf, Lax, Reno	5 days - 2 consults	Successful	Symptoms resolved, Chol reduced (4.86)
38	D.G. (M), 24	Bil/Mel	Yes	Gastritis, Flatulence, Indigestion	Sang/Bil	Sang Inf, Lax, Reno	9 days - 2 consults	Successful	Symptoms resolved.
39	F.W. (F), 63	Phleg/Mel	Yes	Arthritis, Diab (BG: 9.5)	Mel/Bil	Mel Inf, Lax, Reno, Bil Inf	23 days - 5 consults	Successful	Symptoms resolved, patient walks without crutch, BG reduced (6.3)
40	N.H. (M), 52	Bil/Mel	No	Bell's Palsy, HTN (132/80)	Phleg/Mel	Phleg Inf, Lax, Reno	11 days - 3 consults	Part. Suc	Symptoms resolved.
41	W.D. (F), 63	Phleg/Sang	No	Allergies, , Dry Cough, Throat, Chol (6.82)	Bil/Mel/Phleg	Bil Inf, Lax, Reno, Mel Inf, Phleg Inf.	25 days - 6 consults	Successful	Symptoms resolved, Chol reduced (5.06)

42	S.P. (M), 34	Phleg/Mel	No	Gastritis, Hyperacidity	Bil	Bil Inf, Lax, Reno	8 days - 4 consults	Successful	Symptoms resolved.
43	R.A.T. (M), 54	Sang/Phleg	Yes	Diab (BG: 14.5), Chol (6.77), HTN (160/90), Influenza, Nasal congestion, Frontal Headaches	Sang/Phleg/Mel	Phleg Inf, Lax, Reno	45 days - 4 consults	Successful	Symptoms resolved. BG reduced (10.5), Chol reduced (5.61), HTN reduced (140/70)
44	F.S. (F), 42	Sang/Bil	Yes	Upper resp infection, Ear inflammation, Left nostril blocked, Itchiness of eyes, Exudate in eyes, BG (5.2)	Sang/Bil/Phleg	Sang Inf, Lax, Reno, Bil Inf	15 days - 5 consults	Successful	Symptoms resolved, BG reduced (4.7)
45	R.A. (F), 45	Bil/Mel	Yes	Parasthesia, Constipation, HTN (130/90), Diab, BG (5.7), Chol (6.30)	Mel	Mel Inf, Lax, Reno	9 days - 3 consults	Part. Suc	Symptoms resolved, HTN reduced (124/80), BG reduced slightly (5.3), Chol remained similar (6.37)
46	R.A. (M), 53	Sang/Phleg	No	Arthritis, Sciatica, Consipation, HTN (140/90), Chol (5.71)	Mel	Mel Inf, Lax, Reno	43 days - 3 consults	Successful	Symptoms resolved, HTN reduced (113/75), Chol reduced slightly (5.49)
47	M.M. (M), 71	Sang/Phleg	Yes	Leg oedema, HTN (180/100)	Phleg	Phleg Inf, Lax, Reno	14 days - 3 consults	Successful	Symptoms improved, walking without aid, less swelling and no oedema, HTN reduced (120/70)
48	P.Z. (F), 46	Phleg/Sang	No	Arthritis	Mel	Mel Inf, Lax, Reno	11 days - 4 consults	Successful	Symptoms resolved
49	N.S. (F), 64	Sang/Phleg	No	Cervical spondylosis, Await knee replacement, HTN (140/80), BG (5.6)	Mel/Sang	Mel Inf, Lax, Reno	29 days - 5 consults	Successful	Symptoms resolved (still awaiting knee replacement, but not using cane, gait improved), HTN reduced (120/70), BG slightly reduced (5.3)
50	I.T. (M), 68	Phleg/Mel	No	Tiredness, Lack of energy, HTN (160/90)	Mel/Sang	Mel Inf, Lax, Reno	22 days - 4 consults	Part. Suc	All presenting symptoms resolved, but HTN worsened (170/110)
51	R.A. (F), 58	Sang/Phleg	Yes	Resp Tract Infection, Influenza, Myositis, HTN (132/90)	Phleg/Sang	Phleg Inf, Lax, Reno	16 days - 3 consults	Successful	Symptoms resolved, HTN reduced (104/70)
52	R.A. (F), 56	Phleg/Mel	Yes	Irregular bowel movement, Chol (6.92)	Mel	Mel Inf, Lax, Reno	22 days - 5 consults	Successful	Symptoms improved, Chol reduced (5.14)
53	N.N.N. (M), 78	Phleg/Sang	No	Gout, HTN (170/88), BG (8.2)	Mel/Sang	Mel Inf, Lax, Reno	15 days - 3 consults	Part. Suc	Pain reduced, HTN reduced (150/80), BG reduced (4.6) - ulcer developing - referred.
54	F.A. (F), 49	Sang/Phleg	Yes	Diab (BG: 10.8), Chol (7.45), HTN (132/86)	Phleg/Sang	Phleg Inf, Lax, Reno, Lochol	33 days - 7 consults	Successful	BG reduced (9.9), Chol reduced (5.94), HTN reduced (122/84)
55	N.N.M. (F), 29	Phleg/Sang	Yes	IBS, HTN (140/90)	Phleg/Sang	Phleg Inf, Lax, Reno	9 days- consults	Successful	Symptoms resolved, HTN reduced (130/90)
56	L.L. (F), 33	Sang/Bil	No	Migraine, Stress, Constipation	Mel/Bil	Mel Inf, Lax, Reno	29 days - 4 consults	Successful	Symptoms resolved.
57	M.G. (F), 25	Mel/Phleg	yes	IBS, Constipation, Flatulence	Mel/Phleg	Mel Inf, Lax, Reno, Phleg Inf, Septogard	16 days - 4 consults	Successful	Symptoms resolved.
58	A.S. (M), 66	Phleg/Sang	No	OA, Gout, Obesity, Chol (5.66)	Mel	Mel Inf, Lax, Reno, Dry cupping (Votarin, Cortisone)	8 days - 2 consults	Uns	Symptoms showed no improvement, Chol worsened (7.25)
59	M.V. (F), 40	Phleg/Sang	No	Dyspepsia, Myositis, BG (10.1), Chol (4.13)	Mel	Mel Inf, Lax, Reno	9 days - 3 consults	Uns	Right neck tenderness and constipation resolved. Dyspepsia persist, BG reduced (5.7), Chol worsened (5.19)

60	M.A. (M), 21	Mel/Bil	Yes	Arthralgia, Rheumatism	Mel	Mel Inf, Lax, Reno	22 days - 4 consults	Uns	Symptoms not resolved.
61	G.S., (F), 55	Sang/Phleg	No	Hypercholesterolemia, Myositis, Chol (6.18)	Mel	Mel Inf, Lax, Reno	2 days - 2 consults	Successful	Chest pain completely resolved; slight reduction in Chol: 6.02.
62	G.H. (F), 55	Sang/Phleg	No	Fybromyalgia, HTN (138/80), Chol (6.08)	Mel	Mel Inf, Laxo, Reno, massage	15 days - 4 consults	Successful	Body pain improved. HTN reduced, Chol improved.
63	J.T. (F), 68	Mel/Phleg	Yes	Hypertension, HTN (130/90) Chol (5.09)	Mel	Mel Inf, Laxo. Reno, Livotibb, Lochol, Radiq	45 days - 12 consults	Successful	HTN (132/90), Chol (4.78) improved
64	K.V. (F), 65	Sang/Phleg	No	Hypertension, Myositis, HTN (160/100)	Mel	Mel inf, Laxo, Reno, Pressure eeze forte, Dry cupping, massage	35 days - 7 consults	Successful	Body pain resolved, regular bowel movement, HTN (128/80 improved.
65	W.K. (F), 45	Phleg/Mel	Yes	Rheumatism, HTN (100/60), Chol (HI)	Mel/Phleg	Mel Inf, Laxo, Reno, Dry cupping, Phleg Infu	51 days - 6 consults	Part. Suc	Improvement in pain, Chol (7.03) improved.
66	R.H. (M), 40	Sang/Phleg	Yes	Rheumatoid arthritis, indigestion, HTN (150/92)	Mel/Sang	Mel Inf, Laxo, Reno, Sang Inf,	36 days - 3 consults	Part. Suc	No joint pain, less bloated, temporal headaches persist, HTN (R - 162/100) (L - 160/100) worsened.
67	B.S. (F), 56	Mel/Bil	Yes	Arthritis, indigestion, HTN (140/70)	Mel	Mel Inf, Laxo, Reno	22 days - 4 consults	Successful	Symptoms resolved. (HTN (128/70) improved.
68	D.P. (F), 58	Sang/Bil	No	Backache, HTN (160/100), Chol (6.48)	Mel	Mel Inf, Laxo, Reno	42 days - 5 consults	Uns	Backache (due to injury), HTN (R - 160/120) (L - 130/80), Chol (5.19 improved.
69	J.M. (M), 46	Sang/Bil	No	Gout, Chol (HI)	Mel/Phleg	Mel Inf, Laxo, Reno, Phleg Inf, Septogard, Flu relief	29 days - 4 consults	Successful	No gout pain, Chol (4.86) improved.
70	A.W. (F), 65	Phleg/Sang	No	Post chemo pain, HTN (180/120), BG (8.6)	Mel	Mel Inf, Laxo, Reno,	53 days - 8 consults	Part. Suc	Improvement wrt pain. HTN: 150/100, Bg: 8.7.
71	I.A., (F), 44	Phleg/Mel	Yes	Congestion, HTN (170/120), Chol (6.16)	Mel	Mel Inf, PEF, PE, Reno, Laxo	8 days - 3 consults	Successful	Dizziness only when walking. Feeling well. Congestion cleared, interrupted sleep improved. Unilateral headaches resolved. HTN: 132/90, Chol: 4.51.
72	U.J., (M), 55	Mel/Phleg	Yes	Neuralgia, Gastric reflux, Chol (6.10)	Phleg/Mel	Phleg Inf, Laxo, Reno, Mel Inf, dry cupping	28 days - 6 consult	Part. Suc	Numbness and paresthesia resolved. Reflux resolved. Back pains/spasms remains, Chol: 5, 02.
73	C.V.R. (F) 56	Sang/Bil	No	Tendinitis/OA, BG (8.8) random	Mel	Mel Inf, Laxo, Reno, dry cupping, wet cupping	27 days - 5 consults	Successful	Shoulder pain resolved, BG: 13.7 (random).
74	S.A., (F), 54	Bil/Mel	Yes	Bladder infection/Mouth Ulcers/Respiratory tract infection	Bil/Mel/Sang	Bil Inf, Laxo, Reno, Mel Inf, PEF, Sang Inf	17 days - 7 consults	Successful	Symptoms resolved.
75	A.B., (F), 49	Sang/Bil	No	Arthritis	Mel/Phleg/Bil	Mel Inf, Phleg Inf, Laxo, Reno, Bil Inf	90 days - 7 consults	Successful	Symptoms resolved.
76	B.D., (F), 46	Phleg/Mel	Yes	Dorsalgia/constipation, HTN (140/90), Chol (6.25)	Mel	Mel Inf, Laxo, Reno	102 days - 7 consults	Successful	Symptoms resolved, HTN: 124/80, Chol: 4.29.
77	N.B., (F), 77	Mel/Bil	Yes	Costochondritis, Osteoarthritis, flatulence	Mel	Mel Inf, Laxo, Reno	15 days - 3 consults	Successful	Symptoms resolved.
78	A.K.H., (M), 67	Phleg/Sang	No	Arthritis, Chol HI	Mel	Mel Inf, Laxo, Reno	25 days - 5 consults	Part. Suc	Hip pain resolved, Chol: Hi.

79	C.P., (F), 61	Mel/Phleg	Yes	Sarcoidosis + sinusitis	Phleg/Mel	Phleg Inf, Laxo, Reno, dry cupping, Mel Inf	29 days - 4 consults	Successful	Nasal congestion resolved, breathing is much better and no need to pause while speaking or in between sentences.
80	G.V., (F), 61	Phleg/Sang	No	Myositis/Arthritis	Mel	Mel Inf, Laxo, Reno	19 days - 4 consult	Successful	Symptoms resolved.
81	P.A., (F), 78	Bil/Mel	Yes	Arthritis, HTN (150/90), BG (11.7), Chol (6.68)	Mel/Bil/Phleg	Mel Inf, Laxo, Reno, Bil Inf, Phleg Inf	62 days - 5 consult	Successful	Pain and stiffness resolved. HTN: 140/80 BG: 10.9 Chol: 7.19.
82	S.A., (F), 41	Phleg/Mel	Yes	Myositis, HTN (140/90)	Mel	Mel Inf, Laxo, Reno	31 days - 5 consults	Part. Suc	Neck pain resolved, Backache worsened, Urine: NAD, HTN: 130/100.
83	C.J., (F), 63	Sang/Phleg	No	HPT, Chol, Rheumatism, Diabetes, HTN (180/110), Chol (HI), BG (13.6)	Mel/Phleg/Bil	Mel Inf, Laxo, Reno, Phleg Inf, Bil Inf, dry cupping	23 days - 4 consult	Successful	Shoulder pain improved, HTN: 120/80, Chol: 4.25, BG: 11.6.
84	E.L., (F), 79	Mel/Bil	Yes	Constipation, Rheumatism, Chol (7.65)	Mel/Bil	Mel Inf, Laxo, Reno, Bil Inf, dry cupping	33 days - 5 consults	Part. Suc	Hip pain intermittent, constipation improved, Chol: 4.40.
85	S.M., (M), 65	Sang/Bil	No	Post stroke complications, HTN (170/90), Chol (7.0)	Mel	Mel Inf, Laxo, Reno, PEF, Loch, dry cupping	20 days - 4 consults	Part. Suc	Increased flexibility in right arm. HTN: 142/80 Chol: 6.33.
86	P.V., (M), 61	Sang/Phleg	No	RA, hypercholesterolemia	Mel/Bil/Sang	Bil Inf, Mel Inf, Laxo, Reno, Sang Inf	21 days - 3 consults	Successful	Symptoms resolved.
87	F.M., (F), 65	Mel/Phleg	No	Arthritis, uti, menopause	Mel/Bil	Mel Inf, Laxo, Reno, Bil Inf, dry cupping	12 days - 3 consults	Successful	Backache resolved, hot flashes improved, Urine: NAD.
88	E.Z., (M), 43	Sang/Phleg	Yes	Sinusitis/nasal polyps, HTN (140/90)	Phleg	Phleg Inf, Laxo, Reno	27 days - 4 consults	Part. Suc	Temporary relief using infusion and meds, decrease in nasal inflammation, nasal polyps still present. HTN: 122/80.
89	M.K., (F), 67	Sang/Phleg	No	OA, HTN (180/80)	Mel/Bil/Sang	Mel Inf, Laxo, Reno, Bil Inf, Sang Inf, massage,	35 days - 6 consults	Part. Suc	Arm and leg pain improved. HTN:
90	M.Y.A., (M), 58	Sang/Bil	No	OA/Myositis/Tendinitis	Mel/Bil	Mel Inf, Laxo, Reno, dry & wet cupping, Bil Inf	27 days - 4 consults	Successful	Symptoms resolved.
91	P.M., (F), 39	Mel/Bil	Yes	Headaches, abdominal cramps, acne	Mel/Bil	Mel Inf, Laxo, Reno, Bil Inf	9 days - 3 consults	Successful	Face papules still visible (improved), occipital/cervical pain and abdominal cramps resolved.
92	D.H.A., (M), 39	Sang/Phleg	No	Gastritis, HTN (150/90)	Bil	Bil Inf, Laxo, Reno, dry cupping	7 days - 3 consults	Successful	Symptoms resolved. HTN: 130/80
93	L.F., (F), 40	Sang/Bil	Yes	Acne	Sang/Bil	Sang Inf, Laxo, Reno, Calm cream, Episone e mix, Sang Inf, Livotibb, Heamoclear syrup, dry & wet cupping	77 days - 8 consults	Successful	Lesions cleared up, no new lesions developing, no inflammation, only old acne scars.
94	M.M., (F), 54	Mel/Phleg	Yes	Arthritis, HTN (140/98), BG (15.3), Chol (6.9)	Mel	Mel Inf, Laxo, Reno, Rummamix, dry cupping	12 days - 3 consults	Successful	Symptoms resolved. HTN: 140/100 BG: 12.6 Chol: 5.90.
95	R.A., (F), 47	Bil/Mel	Yes	Fibromyalgia, Arthritis	Mel/Bil	Mel Inf, Laxo, Reno, Bil Inf	140 days - 5 consults	Successful	No need for pain meds, pain resolved, felt great using infusion, nails improved, hot flashes controlled on infusions.
96	S.S., (F), 22	Sang/Bil	Yes	Urinary tract infection	Sang	Sang Inf, Laxo, Reno	7 days - 2 consults	Successful	Symptoms resolved.
97	A.D., (F), 60	Phleg/Sang	No	Arthritis	Mel	Mel Inf, Laxo, Reno	19 days - 2 consults	Successful	Symptoms resolved.
98	X.G., (M), 22	Mel/Phleg	No	Uti (kidney, liver)	Sang	Sang Inf, Laxo, Reno	8 days - 3 consults	Successful	Symptoms resolved.

99	S.S., (M), 45	Phleg/Sang	No	Arthritis, HTN (170/120), Chol (6.15)	Mel	Mel Inf, Laxo, Reno	12 days - 3 consults	Successful	Lower limb pain resolved. Only uses the infusion when necessary. HTN: 150/100 Chol: 5.73.
100	L.A.W., (F), 22	Phleg/Sang	Yes	Sinusitis/ Upper respiratory tract infection/Urinary tract infection	Sang/Phleg	Sanf Inf, Laxo, Reno, Phleg Inf	7 days - 3 consults	Successful	Symptoms resolved.

Results: Hypertension, Hypercholesterolemia, Blood Glucose

Patients were only considered if the readings were above the following: HTN (BP > 130/90), Diabetes (BG random > 7), and Chol (> 5). The results on hypertension revealed that the blood pressure of 23 of the 25 patients reduced, whereas in 2 patients the blood pressure increased. Of the 22 patients with hypercholesterolemia the cholesterol level decreased in 20 patients whereas in 2 patients there was a slight increase. With respect to patients with diabetes, of the 17 patients, the glucose levels decreased in 14 patients - this may not be a true reflection as it was random testing. Kindly also note that the patients selected below were not on any medication for either of the conditions.

Blood Pressure (mmHg)			Cholesterol (mmol/l) Random			Blood Glucose (mmol/l)		
CS. No.	Before	After	CS. No.	Before	After	CS. No.	Before	After
29	134/90	110/70	31	>7.9	5.99	29	9	6.7
40	132/80	110/70	33	5.6	4.17	30	10	8.2
43	160/90	140/70	35	7.47	5.09	39	9.5	6.3
45	130/90	124/80	37	5.63	4.86	43	14.5	10.5
46	140/90	113/75	41	6.82	5.06	53	8.2	4.6
47	180/100	120/70	43	6.77	5.61	54	10.8	9.9
49	140/80	120/70	46	5.71	5.49	58	7.3	9.8
50	160/90	170/110	52	6.92	5.14	59	10.1	5.7
51	132/90	104/70	58	5.66	7.25	70	8.6	8.7
53	170/88	150/80	61	6.18	6.02	73	8.8	13.7
54	132/86	122/84	62	6.08	5.12	80	8.4	6.6
55	140/90	130/90	65	HI	7.03	83	13.6	11.6
62	138/80	122/80	69	HI	4.06	94	15.3	12.6
67	140/70	128/70	71	6.16	4.51	97	9.2	5.8
70	180/120	150/100	72	6.1	5.02			
75	140/78	120/80	76	6.25	4.29			
76	140/90	124/80	81	6.68	7.19			
80	154/84	160/84	83	HI	4.25			

82	140/90	130/100	84	7.65	4.4		
83	180/110	120/80	94	6.9	5.9		
89	180/80	150/90	97	5.58	5.5		
92	150/90	130/180	99	6.15	5.73		
94	140/98	140/100					
97	160/100	140/86					
99	170/120	150/100					

Results: CRP, FBC, Thyroid Profile, Coagulation Tests

Table below are the results of C-Reactive Protein (CRP), Coagulations Tests (Prothrombin Time (PT), International Normalized Ratio (INR), Activated Partial Thromboplastin Time (APTT), Thyroid functions (Free T4) Thyroid Stimulating Hormone (TSH) and Full Blood Count (FBC).

CRP			FBC			Thyroid Profile					Coagulation						
< 5			WCC: 4-11; Lymp.; RCC: (M)			Free (T4 7.2-16.4)			TSH (0.37-3.50)		PT			INR		APTT	
CS. No.	Before	After	CS. No.	Before	After	CS. No.	Before	After	Before	After	CS. No.	Before	After	Before	After	Before	After
65	6.3 (H)	4.5	65	White cell count (11.3 H) & lymphocytes (4.77 H)	White cell count (9.9) & lymphocytes (3.96)	65	9.3	10.4	5.11 (H)	4.93 (H)	65	Not done	Not done	1	Not done	13.7	32.9
66	9.7 (H)	5.4 (H)	66	RCC: 6.73	Not done	66	11.2	Not done	2.22	Not done	66	17.9	13.2	1.6 (H)	1.1	80.7 (H)	52.5 (H)
67	0.9	0.7	67	NAD	NAD	67	11.4	10.3	1.63	1.55	67	12	12.4	1	1.1	34.1	38.8 (H)
68	7.9 (H)	7.7 (H)	68	NAD	NAD	68	9.4	8.4	2.14	1.29	68	12.9	12.3	1.1	1.1	41.7 (H)	37.7
70	17.9 (H)	20.9 (H)	69	RCC: 6.01	5.73	69	9	Not done	1.32	Not done	69	12.2	11.2	1	1	30.7	31.6
			70	NAD	NAD	70	13.7	Not done	0.27 (L)	Not done	70	13.3	13.1	1.1	1.1	31.9	33.3