

THE EFFECTIVENESS OF HOMOEOPATHIC SIMILLIMUM IN
THE TREATMENT OF JOB BURNOUT IN THE HUMAN
SERVICES FIELD

By

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I, Heshma Vaithilingam, do declare that this mini dissertation is representative of my own work, both in conception and execution.

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ABSTRACT

The purpose of this double blind placebo controlled study was to evaluate the efficacy of homoeopathic simillimum in the treatment of job burnout in the human services field.

30 participants were selected for this study based on certain inclusion and exclusion criteria. The participants were randomly divided into treatment and placebo groups – 14 participants in the treatment group and 16 participants in the placebo group. The study was conducted at The Durban Institute of Technology. The measurement tool used was the Maslach Burnout Inventory-Human Services Survey (*Appendix A*).

The initial consultation consisted of a detailed homoeopathic case history and full physical examination. Two follow-ups were conducted at 4-week intervals during which participants completed the Maslach Burnout Inventory and the researcher conducted a follow up consultation. Remedies were prescribed at the initial consultation and at the first follow up. The Burnout scores for each of the 3 subscales at the initial consultation were baseline measurements. On completion of the trial the participants who were on placebo were offered free treatment.

Due to the small sample size, non-parametric tests were conducted. The data collected from the Maslach Burnout Inventory was evaluated and analysed using the SPSS software (version 12.1). Intra-group analysis (within each group) of the 3 subscales of emotional exhaustion, depersonalisation and personal accomplishment indicated a significant difference in both treatment and placebo groups between follow up 1 and baseline, follow up 2 and follow up 1 and follow up 2 and baseline. Inter-group analysis (between the groups) of the 3 subscales of emotional exhaustion, depersonalisation and personal accomplishment at baseline, follow up 1 and follow up 2 showed no significant difference except the baseline readings for personal accomplishment.

The results of this study lead to the conclusion that statistically, the homoeopathic simillimum was not effective in the treatment of job burnout although there was an improvement in both groups.

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DEFINITIONS

Arndt Shulz Law

The Arndt Shulz Law states that for every drug, small doses stimulate, moderate doses inhibit and large doses kill (Lessell, 1994:110).

Burnout

Burnout is defined as a syndrome of emotional exhaustion, depersonalisation and reduced personal accomplishment. It occurs as a progressive syndrome among individuals who are faced with tremendous amounts of work-related stress such as those in the human services field (Maslach, Jackson and Leiter, 1996:4).

Burnout Syndrome

This syndrome consists of 3 main symptoms of emotional exhaustion, depersonalization and reduced personal accomplishment (Burnard, 1991:8).

Conflict

Conflicts arise because of a clash of needs, motives or interests of 2 or more people (Bergh and Theron, 2003:399).

Constitutional Type

Refers to the combination of psychological and physical features of the individual and the manner in which they interact with the environment. It is the person's inherited and acquired physical, mental and emotional makeup (Geddes and Lockie, 1995:24).

Depersonalisation

The development of a cynical attitude towards colleagues or clients, and the development a sense of alienation from others in the workplace (Burnard, 1991:8).

Dilution

To make smaller or less. Dilute doses are doses made minute through potentiation and through the use of smaller amounts (O'Reilly, 1996:301).

Emotional Exhaustion

Emotional exhaustion is a feeling of not being able to give of one's best at a psychological level anymore. Individuals are likely to develop feelings of apathy, hopelessness and indifference towards others (Burnard, 1991:8).

Emotion-focused Coping Response

In the emotion-focused coping response individuals react in an emotional way and destructive behaviours such as self-blame, substance abuse and avoiding the stressor develop (Bergh and Theron, 2003:401).

External Locus of Control

Those individuals who believe that their accomplishments are due to luck, fate or other people. They generally have a lower self-esteem and self-efficacy. In people with an external locus of control, burnout is higher (Maslach, 2001:13).

General Adaptation Syndrome

Hans Selye discovered that the body's reaction to sustained stress occurs in 3 major phases known as the General Adaptation Syndrome. These are the Alarm reaction, Resistance stage and Exhaustion (Whybrow, 1997:151).

Homoeopathy

Homoeopathy is a system of medicine that works by stimulating the body's vital force to cure illness and was founded by Samuel Christian Hahnemann. It is based on the principle of "like cures like" and that all disease exists dynamically or energetically and then filters through to the organs and systems of the body (Vithoulkas, 1987:15).

Internal Locus of Control

People who have an internal locus of control are those that believe that they have control over what they accomplish because of their personal behaviour and competencies (Maslach, 2001:13).

Law of Infinitesimal Dose

The minimum dose required to bring about cure, developed in accordance with the Arndt Shulz law by Hahnemann, in order to avoid the unwanted toxic effects of the drug (Kayne, 1997:26).

Law of Similars

Homoeopathy is based on the Law of Similars, or “like cures like.” This implies that a substance that produces certain symptoms in healthy people can cure the same symptoms in the sick. The homoeopathic remedy produces an artificial medicinal disease state that is similar and stronger than the natural disease but not the same. This is produced on the dynamic or energetic plane (De Schepper, 2001:26).

Maslach Burnout Inventory

The Maslach Burnout Inventory (MBI) is recognized as the leading measure of burnout (Maslach, Jackson and Leiter 1996:4).

Maslach Burnout Inventory – Human Services Survey

The Maslach Burnout Inventory-Human Services Survey (MBI-HSS), developed by Maslach, Jackson and Leiter over a period of 8 years, is designed to measure the three aspects of burnout, namely, emotional exhaustion, depersonalisation and reduced personal accomplishment. Each aspect is measured as a separate subscale (Maslach, Jackson and Leiter 1996:5).

Organisation

A group of people united for some common goal (Arnold and Feldman, 1986:3).

Organisational Behaviour

Organisational behaviour involves the way organisations influence the thoughts, feelings and actions of its members. These organisations influence the way employees view themselves in terms of their jobs and as individuals (Arnold and Feldman, 1986:4).

Placebo

The literal translation of the word “placebo” means “I will please” (Newman, 1994:1298). It is made of a medicinally inert substance and is used in controlled studies for the purposes of comparison with active drugs. It is also prescribed with the intent to relieve symptoms or meet patient’s demand (Berkow and Beers, 1999:2585).

Plussing

Refers to the process of succussing a remedy to minutely increase the potency level so that the individual doesn't receive the same potency many times.

Hahnemann advocated that when each new dose is slightly heightened in potency, as in a plussed remedy, the individual is brought closer to cure without an aggravation (O'Reilly, 1996: 219).

Potentisation

A multi-step process (involving dilution and succussion, or trituration) by which the inner medicinal power of a crude substance is released or increased (O'Reilly, 1996:304).

Problem-focused Coping Response

Problem-focused coping response involves rational thinking and planning in response to stress take precedence. Individuals define their problems and find alternatives to solve the problem causing the stress (Bergh and Theron, 2003:401).

Reduced Personal Accomplishment

The final aspect is reduced personal accomplishment, which is a sense that one has not achieved the goals set for oneself due to various reasons pertaining to the job itself and to personal expectations (Burnard, 1991:8).

Serotonin

A group of neurotransmitters, collectively known as monoamines, are responsible for balancing the mood. Of most importance in this group is a neurotransmitter known as serotonin. This neurotransmitter, although present in small numbers in the brain, has many functions. The main function is that it inhibits impulsive behaviour by inhibiting that part of the brain (the hypothalamus) responsible for impulses such as aggression. It is known as the body's 'feel good hormone' (Norden, 1995:16).

Simillimum

That medicinal potence capable of producing a set of symptoms which are the most similar to those in the case of disease to be cured (O'Reilly, 1996:350).

Stress

Stress is defined as an inherent primitive response to anything in the external environment or internal environment. Many things can act as stress triggers including noise, pollution, low blood sugar levels, frustration, anger, overwork, antagonism, prejudice and taking on too much (Shapiro,1996:10).

Stressor

A stressor is defined as being any factor that has the ability to cause stress (Bergh and Theron, 2003:399).

Stress Hormones

Cortisol, adrenalin and noradrenalin are released from the adrenal glands (situated above the kidneys) as part of the hormonal response to stress. They are responsible for causing an increased heart rate, rapid breathing, muscle contractions, stimulation of the bladder wall, high blood sugar levels and increased metabolism (van der Merwe, 2001:12).

Stress Tolerance

Stress tolerance refers to the ability of a person to withstand stress without becoming seriously impaired. The higher the level of tolerance, the lower the level of stress for that individual (Carson and Butcher, 1992:144).

Succussion

Vigorous shaking with impact. It is part of the multi-step process for potentiating substances to bring about their medicinal powers. Hahnemann suggested that substances be succussed by holding a vial of the properly diluted substance in the hand and striking a hard but elastic body such as a leather-bound book, using an up and down motion of the forearm (O'Reilly, 1996:353).

Type A and Type B Personality Types

Type A and B personality types represent two different ways in which people react in the work situation, perform tasks and cope with stress (Geddes and Grosset 1997:255).

Vital Force

That force/power/energy that enlivens the material organism and regulates all bodily functions so the body functions in harmony and health (O'Reilly, 1996:323).

CHAPTER ONE

INTRODUCTION

Burnout is defined as a syndrome of emotional exhaustion, depersonalisation and reduced personal accomplishment (Maslach, Jackson and Leiter, 1996:4).

Emotional exhaustion is one of the main aspects of the burnout syndrome. Caring for others as an ongoing process can lead to a depletion of emotional resources, especially as job demands increase. Individuals then begin to isolate themselves from others, as a way of coping with this emotional exhaustion, known as depersonalization (Burnard, 1991:10). Reduced personal accomplishment is the development of negative self- evaluation which may cause the worker to leave their profession (Burnard, 1991:11).

Symptoms of burnout manifest on the mental, emotional and physical level. Individuals experience among others, intense weariness, insomnia, decreased energy, chronic fatigue, recurrent colds, headaches, gastro-intestinal tract disturbances, shortness of breath and general aches and pains. They may also develop depression, hopelessness, irritability, weeping, anger outbursts and sadness (Ellis, 1996: 295).

There has been a fair amount of research done on burnout, yet no effective treatment has been found. The prevalence of burnout is escalating and the only way suggested in dealing with burnout is to implement courses on coping strategies and stress management, within companies. This approach however requires time and effort and is costly to the employer ⁽¹⁾.

Homoeopathy is a form of medicine that treats holistically, so it will not only help mental aspects of burnout, but physical symptoms as well, without causing side-effects. Homoeopathy is based on the Law of Similars, or “like cures like.” This

implies that a substance that produces certain symptoms in healthy people can cure the same symptom in the sick (De Schepper, 2001:26). Each individual has their own personality and constitutional type which is described by, and correlates mostly to, the emotional, mental and physical symptoms of a particular remedy, which is the individual's simillimum remedy. This simillimum remedy helps the individual to strengthen and calm the mind and emotions, thereby enhancing internal coping mechanisms (Souter, 1993:16).

The Maslach Burnout Inventory-Human Services Survey (MBI-HSS), used for the purposes of this study, is designed to measure the three aspects of burnout, namely, emotional exhaustion, depersonalisation and reduced personal accomplishment. Each aspect is measured by a separate subscale namely, the emotional exhaustion (EE), depersonalisation (Dp) and reduced personal accomplishment (PA) subscales. An individual may be rated as having a high, average or low degree of burnout, depending on their scores (Maslach, Jackson and Leiter, 1996:5).

1.2 PROBLEM STATEMENT

The purpose of this double-blind placebo-controlled study was to evaluate the efficacy of a homoeopathic simillimum in the treatment of job burnout in terms of the Maslach Burnout Inventory.

1.3 ASSUMPTIONS

- Participants took the medication as prescribed
- Participants did not have a change of lifestyle and did not take any other curative treatment for their symptoms of burnout for the duration of the trial.

1.4 HYPOTHESES

It was hypothesised that simillimum would have a significant impact on job burnout in terms of the findings of the Maslach Burnout Inventory - Human Services Survey.

It was also hypothesized that simillimum would have a more significant impact on job burnout as compared to placebo in terms of the measurement tool completed during the study.

For the above two hypotheses, the null hypothesis states that there are no significant differences between the relevant variables. The alternate hypothesis states that there will be a significant difference between the variables according to the measurement tool.

CHAPTER 2

REVIEW OF RELATED LITERATURE

2.1 DEFINITION

Burnout is defined as a syndrome of emotional exhaustion, depersonalisation and reduced personal accomplishment. It occurs as a progressive syndrome among individuals who are faced with tremendous amounts of work-related stress such as those in the human services field (Maslach, Jackson and Leiter, 1996:4).

The human services field incorporates individuals such as teachers, doctors, nurses, hospital staff, emergency service workers, social workers, psychologists, mental hospital staff, counselors, attorneys, lawyers, policemen, bank workers, librarians, administrative staff and those involved in marketing and sales.

Of the three aspects of the burnout syndrome, emotional exhaustion is the main aspect ⁽¹⁾. Caring for others as an ongoing process can lead to a depletion of emotional resources, especially as job demands increase. Workers find that they are not able to get as emotionally involved with their patients and clients as they once used to. They also develop feelings of despondency, as they cannot fully deal with their clients' or patients' problems due to a lack of interest on their part ⁽¹⁾. As a result of this, workers begin to feel that they are not as adequate and efficient enough as they should be.

Arising from this feeling of despondency is the second dimension of the burnout syndrome, which is depersonalization. Individuals begin to isolate themselves from others, especially in the work environment, as a way of coping with this emotional exhaustion. The individual may then develop a sense of alienation from others and a cynical approach towards colleagues, clients and their careers. They feel

overwhelmed at the slightest hint of emotional involvement and tend to back away from it (Burnard,1991:10).

Reduced personal accomplishment is the development of decreased self-esteem. The individual feels that they have not achieved anything in their career and feel unhappy with themselves because they feel that they are not good enough for the job, or are not as good as they once were at the job. They begin to feel let down by themselves and others and develop a hopeless state. With this state of mind, the worker is most likely to leave their profession (Burnard, 1991:11).

2.2 THE DEVELOPMENT OF BURNOUT AS A RESULT OF STRESS

The ultimate cause of burnout and the development of this syndrome's variety of symptoms can be traced back to stressors in the workplace. Stress is defined as an inherent primitive response to anything in the external environment or internal environment. Many things can act as stress triggers including noise, pollution, low blood sugar levels, frustration, anger, overwork, antagonism, prejudice and taking on too much. All of these triggers are present in the work environment. In response to these stressors the body reacts in a series of biochemical reactions, which involves the release of several hormones and neurotransmitters that cause an adverse reaction in the body (Shapiro,1996:10).

In order to understand the development of the psychological aspects of burnout, namely emotional exhaustion, depersonalization and reduced personal accomplishment, it is imperative that stress and all its components are understood, including factors that predispose an individual to stress, individual stressor patterns over time, stress coping mechanisms and the most important factor leading to burnout, decompensation under excessive stress. Equally important to understand, is the physiological and biochemical response to stress which leads to the physical signs and symptoms of burnout.

2.2.1 Types of Stressors

There are 3 major factors in the workplace that can cause stress. These factors are known as stressors.

2.2.1.1 Frustrations

When an individual's efforts towards a particular goal are stifled, or when there is no appropriate goal set out, frustration results. This leads to decreased self-evaluation because the individual cannot seem to realise his goal no matter how hard he works, or he simply has no direction because he does not have a goal. The individual begins to feel as if they have failed and are incompetent. In the workplace, factors such as prejudice, discrimination and job dissatisfaction can cause frustration (Bergh and Theron, 2003:399).

2.2.1.2 Conflicts

Conflicts can cause stress because of a clash of needs, motives or interests of 2 or more people. In the work environment, this is a major source of stress leading to burnout (Bergh and Theron, 2003:399).

2.2.1.3 Pressures

Pressure in the work environment is an ever-present source of stress, forcing an individual to achieve specific goals, to speed up and intensify efforts and to behave in a particular way. These pressures are a normal occurrence in daily life, but when an individual's coping mechanisms are taxed, this can lead to maladaptive behaviour patterns. These patterns such as depression, aggression and irritability, when seen in the workplace, are signs of burnout (Bergh and Theron, 2003:400).

2.2.2 Factors predisposing an individual to stress

The severity of stress is often judged by the degree to which it disrupts normal functioning, which depends on the type of stress and the individual's response to it.

2.2.2.1 The Nature of a Stressor

The impact of a stressor depends on its importance, duration and cumulative effect. The longer a stressor operates, the more severe its effects will be.

Prolonged and constant exhaustion for example, as in burnout, is a cause of more intense stress than temporary fatigue. Many stressors at the same time, cause more intense stress due to its cumulative effect. Severity of stress also rises as the need to deal with it draws nearer, for example, deadlines at work cause intense stress as it draws nearer (Carson and Butcher, 1992:143).

2.2.2.2 Perception and Tolerance of Stress

Every individual responds differently to stressors. What may be stressful for one individual may not be to another, so an individual's perception of stress as a threat is an important point. If an individual is faced with a stressor that he feels incapable of handling due to his sense of inadequacy, he is most likely to feel threatened, as he has perceived this stress as something he cannot possibly handle. This leaves the individual feeling that he has no sense of control in dealing with his problems and this contributes to the development of stress. Understanding the nature of a stressful situation and preparing for it can decrease the severity of stress. Stress tolerance refers to the ability of a person to withstand stress without becoming seriously impaired. The higher the level of tolerance, the lower the level of stress for that individual (Carson and Butcher, 1992:144). It has also been reported that those who are burnt out cope with stress in a passive, defensive way as opposed to those that deal with stress in a confrontive, efficient way ⁽¹⁾.

2.2.2.3 Internal and External Resources and Social Support

External resources and support refers to the quality of physical, social and emotional support people receive from their family, intimate relationships, friends, social groups and work groups. If this support is readily available, the severity of stress is lowered because there is always someone to talk to about the problem (Bergh and Theron, 2003:402).

With regards to internal resources, qualities such as personal hardiness, optimism, internal locus of control, stamina, self-efficacy, sense of coherence, learned resourcefulness and self-actualisation, all serve as factors that make an individual more tolerant to stress. This is due to the fact that he has faith in his abilities, he is self motivated and he has an innate ability to handle and overcome whatever stress he is faced with (Bergh and Theron, 2003:401).

2.3 GENERAL PRINCIPLES OF COPING WITH STRESS

There are 3 levels of interaction when it comes to coping with stress namely psychological, biological and socio-cultural.

2.3.1 The Physiological and Biological Stress Response and its Symptoms

The physiological stress response involves a host of biochemical reactions including hormonal and neurotransmitter influences.

The biochemical stress response is initiated when the perception of stress is transmitted via the senses to the higher centres in the brain. It is then passed on to the hypothalamus, pituitary gland and brain stem. From here, substances called neurotransmitters, which are responsible for transmitting messages in the nervous

system, cause an increase in heart rate, shortness of breath, increased metabolism and emotional and mental disturbances.

A group of neurotransmitters, collectively known as monoamines, are responsible for balancing the mood. Of most importance in this group is a neurotransmitter known as serotonin. This neurotransmitter, although present in small numbers in the brain, has many functions. The main function is that it inhibits impulsive behaviour by inhibiting that part of the brain (the hypothalamus) responsible for impulses such as aggression (Norden, 1995:16). Serotonin also has the important function of keeping the body cool. It has been shown that increases in body heat (caused by physical or psychological stress) causes increases in behaviours such as aggression, suicide, impulsive behaviour, seizures, pain, insomnia and alcohol and drug use (Norden, 1995:26). The serotonin system can be viewed as the body's chemical stress adaptation mechanism.

There is however, a complication. Physical and psychological stress immediately signals an increase in the release of serotonin. If the stress lasts for too long, serotonin stores in the brain are depleted (Norden, 1995:29). This release of serotonin causes an increase in the level of serotonin in the blood, which contributes to the development of blood clots. These blood clots may lead to a heart attack (Norden, 1995:30).

With this decreased level of serotonin in the brain, it implies that the hypothalamus is not optimally inhibited leading to aggressive and even violent behaviour. A decreased serotonin level also leads to depression, especially those who have a family history of depression (Norden, 1995:21).

The hormonal response to stress includes the secretion of the stress hormones cortisol, adrenalin and noradrenalin, which cause an increased heart rate, rapid breathing, muscle contractions, stimulation of the bladder wall, high blood sugar levels and increased metabolism.

The urogenital, digestive and immune systems are suppressed because these systems are not needed in the stress reaction. The body goes into 'fight or flight' mode because the body, still primitive in its responses, perceives this signal of stress as a life threatening event. The body will thus do everything it can to fight this stress. So as part of the stress reaction, the endocrine system, represented by the hormones in the blood, cause the heart, lungs, blood vessels, pancreas, liver and kidneys to work harder to provide the body with oxygen and blood sugar for energy, and blood supply to the digestive tract is decreased, as it is not seen by the body to be essential in the stress reaction (van der Merwe, 2001:12-13).

Therefore, it can be established that continuous stress can lead to the symptoms of burnout as the body is in a constant reactive state and cannot keep this up for very long and eventually exhausts all its resources. This then shows as recurrent colds, headaches, gastro-intestinal tract disturbances such as irritable bowel, Crohn's disease, stomach ulcers, shortness of breath, high blood pressure, increased heart rate, general aches and pains, intense weariness and decreased energy (van der Merwe, 2001:17).

2.3.2 The Psychological Stress Response and its Symptoms

On the psychological level, there exist two basic stress coping reactions: problem-focused coping reactions and emotion-focused coping reactions.

In problem-focused coping reactions, rational thinking and planning in response to stress take precedence. Individuals define their problems and find alternatives to solve the problem causing the stress. In the emotion-focused coping response, as the name suggests, individuals react in an emotional way and destructive behaviours such as self-blame, substance abuse and avoiding the stressor develop (Bergh and Theron, 2003:401).

There are 2 types of emotion-focused coping responses. The first refers to responses such as crying, repetitive talking etcetera that function as psychological damage-repair mechanisms (Carson and Butcher, 1992:147). These are natural ways of dealing with stressors, but when these mechanisms are used as the main way of coping with stress, it develops into maladaptive behaviour patterns, which leads to the second type of emotion focused coping response, the self-defense reactions (Bergh and Theron, 2003:402). The rationale behind the defense reactions seems to be a way in which the individual protects himself from the threat of stress. Individuals may become withdrawn, apathetic and hopeless, or they can act out in the form of aggression, violence, verbal sarcasm, refusal to work, cynicism and strikes (Bergh and Theron, 2003:402). These behaviour patterns are seen in burnt out individuals.

As a direct result of continued stress, emotional resources continue to deplete and this gives rise to feelings of depression, hopelessness, irritability, weeping, anger outbursts, mood swings, anxiety and sadness. This continued stress also causes the individual to avoid commitments at work and become detached and uncaring towards his work and responsibilities and these feelings may also be carried over into the family environment (Ellis, 1996:294). It is essential to fully comprehend the magnitude of the psychological conditions of burnout in order to understand the impact that this syndrome has on our society. As has been stated, feelings of burnout spill over into the family environment and thus affect society at large. In a disease-prone personality type, certain underlying personality characteristics, such as a low stress tolerance or an inability to handle stress, predispose the individual to particular illnesses. Emotions such as depression, anger, hostility and negativity are linked to diseases such as heart disease (Bergh and Theron, 2003:400).

Perhaps the greatest consequence of stress and burnout is the development of disorders such as depression, anxiety, and aggression all of which fall under the umbrella of mental illness. The development of depression and its symptoms can

also be attributed to chemical and hormonal imbalances that result from stress (Norden, 1995:22).

2.3.3 The Socio-cultural response to stress

On a socio-cultural level, there are group resources, such as labour unions, religious organisations and law-enforcement agencies (Carson and Butcher, 1992:147). These structures provide a powerful platform for defending the rights of people.

2.4 THE DEVELOPMENT OF BURNOUT

When faced with excessive stress over a period of time, there is a process of decompensation on the biological and psychological levels. This is when the symptoms of the burnout syndrome start appearing.

The body's reaction to sustained stress occurs in 3 major phases, generally known as the General Adaptation Syndrome.

2.4.1 Alarm reaction

Biologically, the body's defense forces are stimulated by the autonomic nervous system. Psychologically, there is increased tension and a heightened sense of awareness. During this stage, symptoms of burnout may occur such as continuous anxiety and tension, gastrointestinal upset and other diseases (Whybrow, 1997:151).

2.4.2 Resistance stage

This is when the body's defense mechanism is performing at its peak biologically. Psychologically, this stage is when coping mechanisms are optimum and problem focused coping strategies are employed. In this stage, self defense mechanisms may start to emerge (Whybrow, 1997:151).

2.4.3 Exhaustion

Bodily resources are finally depleted and the body loses the ability to resist illness. Psychologically, the individual's adaptive responses are depleted and maladaptive defense mechanisms, as discussed earlier, begin to take over (Whybrow, 1997:151).

So, over time, in conditions of intense (acute) stress or protracted (chronic) stress the individual is not able to react in a constructive way to stressors. This results in various physical illnesses, stress and psychological disorders and of course, the burnout syndrome.

2.5 SYMPTOMS OF BURNOUT

This continued stress as discussed earlier leads to the development of various symptoms that are characteristic to burnout. The symptoms range from mental/emotional to physical and arise from the psychological and physical stress responses.

Table 2.1 The symptoms of burnout

Table 2.1 shows the physical, psychological and the behavioural symptoms that may occur with the burnout syndrome.

PHYSICAL	PSYCHOLOGICAL	BEHAVIOURAL
<ul style="list-style-type: none"> • Fatigue • Sleep Disturbances • Stomach Ailments • Migraine Headaches • Frequent colds, flu • Lingering colds • Backaches • Nausea • Muscle tension • Shortness of breath • Frequent injuries • Weight problems • Weakness • Change of eating habits 	<p>Feelings :</p> <ul style="list-style-type: none"> • Anger • Boredom • Frustration • Depression, anxiety • Apathy • Guilt • Suspicion • Helplessness • Pessimism • Irritability • Resentment • Hopelessness <p>Attitudes :</p> <ul style="list-style-type: none"> • Cynicism • Indifference • Self-doubt • Loss of empathy • Poor concentration • Discouraged • Moodiness • Low self-esteem 	<ul style="list-style-type: none"> • Dehumanisation of clients • Victimisation of clients • Criticism, blaming • Defensiveness • Impersonal • Poor communication • Derogatory perceptions • Physical distancing • Withdrawal, isolation • Procrastination • Stick to rigid rules • Clock watching • Absenteeism • Making mistakes • Unnecessary risks • Substance abuse • Marital and family conflict • Conflict with co-workers • Workaholism • Obsessiveness • Humour as a buffer for emotions • Decreased job efficiency • Suicide • Overcommitment or undercommitment

(Bergh and Theron, 2003:433).

The above symptoms are all caused by the physiological effects that stress has on the body, which were discussed previously.

2.6. THE FOUR STAGES OF BURNOUT

Burnout has been divided into four stages of: idealistic enthusiasm, stagnation, frustration and apathy describing each major factor in the burnout chain in succession (Ellis, 1996:295).

Idealistic enthusiasm is a time in which there is high energy, expectations, hopes and ideals in a job. This occurs for example in a new job setting. Initially it is stimulating and exciting and this causes one to build up hopes and ideals. These are in some cases unrealistic. As work pressures and demands increase, these ideals and hopes start to fade away in the mind of the individual resulting in a stage of stagnation. This is when the worker's energy and initial enthusiasm for the job starts to deplete and he/she slows down. As the hopes and ideals are not met, disappointment sets in. This leads to frustration for the worker as the monotony and stress of the job situation continue without hope. Finally, feelings of apathy set in and the worker becomes cynical as all hope and initial excitement disappears. The syndrome of burnout takes over (Ellis, 1996:295).

2.7 CAUSES OF BURNOUT

The causes of burnout are varied and relate to all factors present in the work environment. Causes also overlap with the different types of stressors discussed earlier, so it can be seen how stress leads to burnout. In general, the causes are related to factors in the workplace, including management and colleagues, the work environment and the various demands that are placed on the individual. Personal characteristics and individual personality types are also factors contributing to burnout.

2.7.1 Developmental Theories

Two theories emerged in the early phase of research into burnout. The first is that the best and most idealistic workers experience burnout. The reasoning behind this is that such dedicated people end up doing too much in order to reach their goals and ideals, thus leading to exhaustion and eventual cynicism when their sacrifice has not been sufficient to achieve their goals. A second theory is that burnout results from chronic exposure to job stressors. With this theory in mind it follows that burnout should appear later in people's careers, rather than earlier, and it should remain stable over time if people stay in the same job. Another theory is that burnout results from overload where there are too many demands and too few resources, or from underload, where there is tedium and monotony ⁽¹⁾.

2.7.2 Situational Factors

2.7.2.1 Organizational Factors

Organisations have a huge impact in the lives of their employees and vice versa. Organisational behaviour involves the way organisations influence the thoughts, feelings and actions of its members. These organisations influence the way employees view themselves in terms of their jobs and as individuals (Arnold and Feldman, 1986:4).

There exist structures within the organisation, which control and manage the activities of its employees. These include members of management and other leaders within the organisation, administrative processes, and employee benefits such as reward and development systems, health policies and facilities, social support and communication within the organisation. These various factors come together to make the employee feel important and cared for within the organisation. When these factors are not satisfactory to the employee, they may feel that the effort they put into their work goes unnoticed, their sense of personal

accomplishment diminishes and they are ultimately left demotivated and burnt out (Bergh and Theron, 2003:428).

South Africa is a developing country and organisations are in a constant state of change. Socio-political changes affect the workplace directly. This has resulted in employees being suddenly thrown into new demanding job situations because of fewer job opportunities while also having to deal with changed interpersonal and worker relationships, such as a more varied cultural and religious belief systems that have entered the workplace and more women being put in leadership positions (Bergh and Theron, 2003:428).

A prominent change over recent times is downsizing and mergers within organisations. This violates the psychological contract where it is believed the employer is obliged to provide adequate and predictable working conditions based on perceived promises. Now, it seems that employees are expected to give more in terms of time, effort, skills and flexibility, whereas they receive less in terms of career opportunities, lifetime employment and job security. Violation of this psychological contract is likely to produce burnout ⁽¹⁾.

These constant organisational changes have a profound effect on employees as they continually have to adapt to new conditions and therefore are likely to develop resistance to change although management views change as positive. Change, to an employee, represents new situations and problems, ambiguity and uncertainty with regards to the nature of the job and ultimately results in frustration for the employee as it forces them to re-evaluate their capabilities and values (Buchanan and Huczynski, 1985:418-419).

2.7.2.2. Conflict in the Workplace

Many types of conflict co-exist in the workplace and all of them contribute to the development of burnout by preventing the individual to work to his or her best ability, thus demotivating him. Poor collegial support and a lack of a support system, which may result from conflict, is another precipitating factor in burnout. In such cases, burnout results when there is reduced teamwork and employees do not view each other as friendly and helpful, and management is not viewed as supportive (Levert, Lucas and Ortlepp, 2000:37).

Conflict can occur because of communication problems between parties and this could be due to semantic difficulties or lack of information between parties concerned. Conflict can also arise out of personal differences as all people have varied belief systems and personality characteristics, which are often seen to clash in the workplace due to close interaction of employees because different cultures and religions have different values and belief structures (Bergh and Theron, 2003:257).

2.7.2.2.1 Types of conflict in the workplace

- Intrapersonal conflict: this occurs within the individual and refers to constant conflicting thoughts and feelings within the individual for example, uncertainty, hesitation, stress, anxiety and depression.
- Interpersonal conflict: this occurs when employees in the same environment have conflicting views and thoughts toward each other such as anger, lack of trust and a fear of rejection.
- Organisational conflict: this occurs because of the conflict of interests between employers and employees for example, a salary dispute (Bergh and Theron, 2003:224).

Conflict in the workplace leads to an environment that is tense and individuals find themselves constantly defensive and on high alert. This inevitably leads to burnout.

2.7.3 Individual Factors

2.7.3.1 Job Stress

Many factors play a role in the development of job stress and it is the most important precursor of job burnout. The development of job stress incorporates a number of factors relating to the job itself and the individual within the job setting. These are: job characteristics, job dissatisfaction, job design, interpersonal relationships and personal factors relating to the individual.

- Job characteristics : Quantitative job demands, such as too much work for the available time can lead to burnout as the pressure becomes too much and they eventually become exhausted(Maslach, 2001:9). Qualitative job demands such as role conflict and role ambiguity can also lead to burnout. Role conflict results when conflicting demands are placed on staff by different authorities in the organisation, thus creating dual lines of authority. Role ambiguity results when there is lack of clarity regarding the objective of the job or the scope of one's responsibilities in the job (Levert, Lucas and Ortlepp, 2000:37).
- Job Dissatisfaction : If employees are not motivated to do their work or are not recognised for the efforts, it results in job dissatisfaction and a vicious cycle results because the more demotivated employees become, feelings of job dissatisfaction rise (Bergh and Theron, 2003:152).
- Job design : should include job rotation ; enlargement and enrichment to prevent the development of the burnout syndrome (Bergh and Theron, 2003:152).

2.7.3.2 Demographic Characteristics

Burnout generally occurs at one of two critical times of age, either younger than 30, when an individual's career is still young, or over 40, when the individual is well into his or her career ⁽¹⁾.

Those individuals who are unmarried, especially men, are more likely to suffer from burnout compared to individuals who are married. Singles experience higher levels of burnout than divorced individuals. This relates to the fact that married people have an immediate and trustworthy support system as compared to singles ⁽¹⁾.

Some studies have shown that those with more specialised jobs report higher levels of burnout ⁽¹⁾.

2.7.3.3 Personality Traits

Several personality traits have been studied to discover which type of person would be more susceptible to burnout. Individual's personality traits are influenced by the environment, social and political structures and learned behaviour.

2.7.3.3.1 Locus of Control

People who have an internal locus of control are those that believe that they have control over what they accomplish because of their personal behaviour and competencies. Those who have an external locus of control believe that their accomplishments are due to luck, fate or other people. They generally have a lower self-esteem and self-efficacy. In people with an external locus of control, burnout is higher ⁽¹⁾.

Those individuals with an internal locus of control are more efficient at their work and are therefore more prone to stress. This makes them more vulnerable to reactions such as substance abuse. Those with an external locus of control are more prone to psychological maladjustments, meaning they are more likely to develop conditions such as depression, anxiety, bipolar disorder, etcetera (Bergh and Theron, 2003:328).

2.7.3.3.2 Type A and B Personality Types

Type A and B personality types represent two different ways in which people react in the work situation, perform tasks and cope with stress. Type A personality is associated with a high risk factor for coronary diseases and other stress related problems.

Those individuals with a type A personality are linked to burnout. This personality type has 3 main behaviour patterns:

- Intense aspirational behaviour and conscientiousness: This is characterised by traits such as high ambition, strict performance criteria, willingness to work hard, suppression of tension, working longer hours, high sense of responsibility and competition.
- An intense sense of urgency: This is characterised by impossible time limits for completion of tasks, impatience, restlessness, a feeling of working under constant pressure, doing everything quickly, quick emotional reactions and attempting to do everything at once.
- A lack of caring in interpersonal relationships: This behaviour includes hostility, aggression and anger, egotism, difficulty in following someone else's orders and points of view which leads to them having less patience for people with less insight than them.

Common characteristics of type A behaviour are working longer hours, travelling more for business, sleeping less, more involvement in voluntary work, spending

less time relaxing, working more around the home and deriving little pleasure from socializing. These individuals are more prone to stress on the cardiovascular system and therefore conditions such as coronary heart disease and heart attacks are a common occurrence (Geddes and Grosset 1997:255).

Type B personality, on the other hand, represents behaviour that is the complete opposite of their Type A counterparts. Type B behaviour is characterised by greater work satisfaction, shorter work hours, satisfaction with less compensation, a more relaxed attitude, less competitiveness, more patience, hard work, but without the drive, constraints and time limits. These individuals like to relax and have better interpersonal relationships and therefore, are less prone to develop burnout (Geddes and Grosset 1997:256).

2.8 OUTCOMES OF BURNOUT

The consequences of burnout are potentially very serious for workers, their clients, and the larger institutions in which they interact. Burnout can lead to deterioration in the quality of care or service provided by the staff and is a factor in a high job turnover, absenteeism and low morale. Individuals develop withdrawal behaviours and become dishonest, lazy and disloyal. Absenteeism leads to organisational stress and causes the organisation to incur great costs due to low productivity. High job turnover is an expense to the organisation as well as it is forced to employ and train new staff at a higher rate than normal ⁽¹⁾.

Burnout also leads to increased stress at home, especially if both partners are working. The task and time demands become too much to handle and this leads to spillover effects into the workplace and home (Bergh and Theron, 2003:429).

Aside from the serious symptoms of burnout described earlier, burnout also has been found to correlate with various forms of personal dysfunction including

physical exhaustion, insomnia, increased use of alcohol and drugs and marital and family problems (Maslach, Jackson and Leiter, 1996:4).

The majority of drinkers are men and women who are married and living with their families, and most relevant to burnout, they hold important jobs and are accepted members of community. The impact of substance abuse is far reaching. On a personal level, it leads to family problems such as abuse in the home, financial difficulties, suicide, depression and aggression. It also leads to a list of health disorders such as liver cirrhosis, gastrointestinal haemorrhage, heart disease, a state of malnutrition and even death. It also impacts on society at large as it leads to an increase in automobile accidents and other destructive social behaviours (Carson and Butcher, 1992:297).

Furthermore, people who are experiencing burnout can have a negative impact on other staff members, by causing greater personal conflict and by disrupting job tasks. This means that burnout can be contagious and perpetuate itself in such an environment. Burnout also results in the common disorders like anxiety, depression and drops in self-esteem ⁽¹⁾.

In terms of physical health, there is a wide spectrum of stress related illnesses, the more common ones are: angina, asthma, autoimmune diseases, such as rheumatoid arthritis, lupus, multiple sclerosis, ulcerative colitis and psoriasis, cancer, cardiovascular diseases, colds, depression, substance abuse, type 2 diabetes, high blood pressure, headaches, immune suppression, irritable bowel syndrome, menstrual disorders and ulcers (van de Merwe, 2001:17). Job dissatisfaction has been shown to be one of the leading predictors for heart disease (Shapiro, 1996:11).

2.9 PREVIOUS RESEARCH ON BURNOUT

There has been a fair amount of research done on burnout regarding its prevalence in the human services field, yet no effective treatment has been researched or found except for the mass prescribing of antidepressants and anxiolytics. Many individuals, as a result of burnout, reach a collapsed state and are hospitalised. One of the main ways suggested in dealing with burnout is to implement courses on coping strategies and stress management within companies. The aim is to help workers develop internal coping skills. This approach however requires time and effort and is costly to the employer ⁽¹⁾.

2.9.1 BURNOUT IN PSYCHIATRIC NURSES

Levert, Lucas and Ortlepp (2000), of the University of Witwatersrand Medical School conducted research on the levels of burnout in psychiatric nurses and the contributions of the work environment and a sense of coherence to the development of burnout. Burnout levels were measured using the Maslach and Jackson Burnout Inventory. Environmental variables measured included workload, collegial support, role conflict and role ambiguity. Antonovsky's (1987) sense of coherence (SOC) measured the characteristics of the individual. The total sample number for the group was 94 and the average age was 39 years.

The results of this study showed that approximately 50% of the nursing staff were experiencing high levels of emotional exhaustion and feelings of depersonalisation. 93,4% of the nurses were experiencing very little sense of personal accomplishment. Furthermore, burnout levels in all three categories for South African nursing staff exceeded those of a sample of American nurses, as well as the normative values for health care workers provided by Maslach and Jackson (1986). This can be attributed to the fact that South African hospitals lack resources and social support, and to broader socio-economic aspects related to South Africa such as economic uncertainty and high levels of violence in society.

Emotional exhaustion and depersonalisation correlated significantly with all four of the work environment variables measured. Personal accomplishment correlated only with role conflict. A strong SOC implies that one has adequate coping mechanisms to deal with stress and avoid burnout. The mean SOC score for the sample group was found to be average to low. SOC levels correlated significantly with emotional exhaustion and depersonalisation (Levert, Lucas and Ortlepp, 2000:36-41).

2.9.2 BURNOUT IN JUNIOR DOCTORS

Schweitzer (1994) of the University of Cape Town carried out a research study on stress and burnout in junior doctors. Questionnaires were sent to doctors who had graduated 2 ½ years previously from two universities in South Africa. The average age of the sample group was 28. Most of the group was working in hospitals and 40% of these hospital doctors were in the process of specialising.

It was found that 77.8 % of doctors had experienced symptoms consistent with burnout since graduating. Incidence of burnout was found to be related to an inability to communicate freely with patients in their own language. The highest incidence of burnout was among doctors working in day hospitals and clinics, followed by those in hospital posts. Doctors working in their own practices were the least burnt out. 63% of doctors felt a support group would be helpful. The following table illustrates the actions of the doctors in response to burnout :

Table 2.2 Actions taken in response to burnout

	No.	%
Did nothing	27	40.9
Positive attitude and use of internal resources	16	24.2
Changed jobs	10	15.2
Spoke to family and friends	5	9.4
Rest and relaxation	5	7.5
Counselling / psychotherapy	4	6.0
Took time off	4	6.0
Became depressed	3	4.5
Other	7	10.5

(Shweitzer, 1994:352-354)

As can be seen from the above research articles, research has been done on the prevalence of burnout, but there has been no research into the treatment of burnout. It is for this reason that this research was undertaken in order to find a treatment for burnout.

2.9.3 STATISTICS AND FACTS

An article published in the South African Medical Journal in 2001, titled 'Doctor Burnout Silent and Fatal', revealed the following facts. The Health Committee of the Health Professions Council of South Africa (HPCSA) dealt with an average case load of 113 allegedly impaired doctors per month in the year 2000 as following :

- Alleged drug or alcohol dependency accounted for 72 cases
- 10 cases for schizophrenia
- 8 for depression
- 8 for bipolar disorder
- 5 for personality disorders
- 3 for eye disorders

- 2 for neurological problems
- 1 for Alzheimer's disease
- 1 for tuberculosis
- 1 for diabetes
- 1 for stroke
- 1 for an eating disorder

As mentioned before, burnout can cause these diseases, except for the eye disorders and the case of Alzheimer's.

The figures are dramatically higher than a study done by Professor Bekker (1997 – 1999), which revealed that there were 48 cases of substance abuse during the two year period. Of these 48 cases:

- 23 cases were due to opiate abuse
- 20 cases were due to polysubstance abuse
- 5 cases were due to sedative/hypnotic/anxiolytic abuse

It was also found that many medical practitioners hide their depression and feelings of burnout due to the stigma attached to it that they are not good enough to handle the pressures of their jobs (Bateman, 2001:98-101).

2.9.4 SUGGESTED COPING MECHANISMS

Suggested coping mechanisms to reduce stress and therefore prevent burnout include adopting a hobby, exercising, meditating, decreasing alcohol and caffeine intake and short courses of anxiolytics and antidepressants (Ellis, 1996:326).

Antidepressants however have many side effects, namely gastrointestinal bleeding, nausea, headache, anxiety, dry mouth, insomnia, sexual dysfunction, diarrhoea and tremors ⁽²⁾. Side effects of anxiolytics include drowsiness, confusion, muscle spasm, unsteadiness, headaches, dizziness, light-headedness, indigestion and sexual dysfunction ⁽³⁾.

Other measurements for prevention and treatment include decreasing workload by reconsidering what one is doing and how it is being done. This serves to reprioritise tasks and methods. Delegating should be done where possible. Individuals should improve skills and knowledge by regularly attending courses and conferences. Regular time off should be taken for relaxation and other stress relieving activities mentioned above. Dietary changes should be made as stress is known to deplete plasma levels of vitamins A, E, B₆ and C. Individuals should adopt a healthy eating routine consisting of regular meals of fruits and vegetables, plenty of water and a decrease in processed foods, greasy foods, fast foods and caffeine and alcohol intake. Individuals should nurture and take advantage of support groups such as family. If individuals are experiencing anxiety and other disorders, professional help should be sought (Ellis, 1996:325-329).

2.10 THE PLACEBO EFFECT

Placebo is a medicinally inert substance used in controlled studies for the purposes of comparison with active drugs given to patients. It is also prescribed with the intent to relieve symptoms or meet patient's demand (Berkow and Beers, 1999:2585). The placebo has shown to have an effect on patients, who either get better or worse.

There are 3 major mechanisms that can explain the placebo effect:

- The Opioid Model: release of endorphins (which are the body's natural pain killers) in response to the placebo stimulus.
- The Conditioning Model: a learned response to medical intervention.
- The Expectancy Model: a consciously mediated response.

Placebo effects can also result from contact with doctors and other health care providers, a diagnosis, or even attention from a professional alleviates anxiety (Hart, 1999:31-32).

2.11. THE MASLACH BURNOUT INVENTORY

The Maslach Burnout Inventory (MBI) is recognized as the leading measure of burnout. Initial research on the MBI was based on data from the United States and Canada and subsequent studies have now been done in many countries around the world, and the MBI has been translated into various languages. Psychometric studies of the MBI in these different settings have continued to validate the three dimensional structures of the measure (Maslach, Jackson and Leiter 1996:4).

The Maslach Burnout Inventory-Human Services Survey (MBI-HSS) (*Appendix A*), developed by Maslach, Jackson and Leiter over a period of 8 years, is designed to measure the three aspects of burnout, namely, emotional exhaustion, depersonalisation and reduced personal accomplishment. Each aspect is measured by a separate subscale namely, the emotional exhaustion (EE), depersonalisation (Dp) and reduced personal accomplishment (PA) subscales. The survey consists of 22 questions, with a scoring key of 0-6 for each question. Depending on the final score for each subscale, an individual may be rated as having a high, average or low degree of burnout. A high degree of burnout is reflected in high scores on the emotional exhaustion and depersonalisation subscales and in low scores on the personal accomplishment subscale. An average degree of burnout is reflected in average scores on the three subscales. A low degree of burnout is reflected in low scores on the emotional exhaustion and depersonalisation subscales and in high scores on the personal accomplishment subscale. For the first two subscales, that is, emotional exhaustion and depersonalisation, higher scores represent a higher level of emotional exhaustion or depersonalization, and thus a higher level of burnout on these two subscales. For the personal accomplishment subscale, a high score represents a higher level of personal accomplishment and thus a lower level of burnout on this subscale. The numerical cut off points are as follows:

RANGE OF EXPERIENCED BURNOUT

	LOW	AVERAGE	HIGH
Emotional Exhaustion (EE)	≤16	17 – 26	≥27
Depersonalisation (Dp)	≤6	7 –12	≥13
Personal Accomplishment (PA)	≥39	38 – 32	≤31

(Maslach, Jackson and Leiter 1996:5)

2.12 THE HISTORY AND PHILOSOPHIES OF HOMOEOPATHY

Homoeopathy is a system of medicine that works by stimulating the body's vital force to cure illness and was founded by Samuel Christian Hahnemann. It is based on the principle of "like cures like" and that all disease exists dynamically or energetically and then filters through to the organs and systems of the body (Vithoulkas, 1987:15).

2.13 THE LAWS OF HOMOEOPATHY

2.13.1 The Law of Similars

Homoeopathy is based on the Law of Similars, or "like cures like." This implies that a substance that produces certain symptoms in healthy people can cure the same symptoms in the sick. The homoeopathic remedy works by producing an artificial medicinal disease state that is similar and stronger than the natural disease but not the same. This is produced on the dynamic or energetic plane and not on the physical plane. The body reacting to the stronger artificial disease cures the organism and once the remedy has worked itself out of the body, there is no more disease (De Schepper, 2001:26).

2.13. 2 The Law of Infinitesimal Dose

Hahnemann developed a unique method of dilution, discussed later, because of his theory of minimal dose in accordance with the Arndt Shultz law. He envisioned that in order to bring about cure, the minimum dose required should be administered. In this way, unwanted toxic effects of the drug can be avoided. (Kayne, 1997:26) This correlates to the Arndt Shultz Law which states that for every drug, small doses stimulate, moderate doses inhibit and large doses kill. Thus, as the homoeopathic solutions become more dilute, they should be expected to encourage the healing process (Lessell, 1994:110).

2.14 DILUTION AND POTENTISATION

Hahnemann found that patients symptoms worsened first before getting better when administered with small, dilute doses. To prevent these aggravations he developed a two step method of dilution. He diluted each remedy by succussing it, or shaking it vigorously, and banging it down on a firm surface at each stage of dilution. By vigorously shaking a remedy, he believed the energy of the substance was released. Hahnemann thus found that the more diluted remedies did not produce aggravations and acted faster and more effectively than more concentrated solutions. Hahnemann called these new remedies “potentisations” and the term “potency” is used to describe the dilution or strength of a remedy and is determined by how many times the remedy has been succussed and diluted during preparation (Geddes and Lockie 1995:15).

There are three standard scales of homoeopathic serial dilution and potency. The centesimal scale (denoted by c, CH or C) involves serial dilution of 1 in 100. The decimal scale (denoted by x or D) requires serial dilutions of 1 in 10. The fifty millesimal scale (or LM) requires serial dilutions of 1 in 50 000 using 3CH as a

base, and 100 succussions per dilution, whereas the decimal and centesimal scale employ 10 succussions per dilution. In each scale, the substance is diluted into an ethanol-water mixture. Substances that are not readily diluted in this ethanol – water mix are prepared by trituration up to the 3CH or 6X potencies, which are readily soluble in ethanol-water mixture. Trituration involves the prolonged grinding of the substance in lactose powder in a mortar and pestle (Lessell, 1994:5).

Amedeo Avagadro (1776 -1856) demonstrated that the number of molecules in one mole of any substance is always 6.023×10^{23} . Beyond a dilution of 12CH (24X) or a little higher, no molecules of the original substance have been left in the solution (Kayne, 1997:27).

2.15 PLUSSED POTENCY

The term “plussing”, refers to the process of succussing a remedy to minutely increase the potency level so that the individual doesn’t receive the same potency many times. Hahnemann argued that if an individual receives repeated unchanged doses, that is, many doses of the same potency, it may lead to an aggravation in the patient’s condition. There may also be a gradual decrease in the body’s response to the remedy, in terms of cure. He advocated that when each new dose is slightly heightened in potency, as in a plussed remedy, the individual is brought closer to cure without an aggravation (O’Reilly, 1996: 219).

For the purposes of this study, participants received the treatment in a 30CH plussed form. The reason for this is that burnout is a condition in which the same type of stress is encountered every day, hence the individual needs a slightly higher dose of medication, as in a plussed potency, to help deal with these daily situations and to avoid aggravations. If he were to be given the same potency every day, his body will become accustomed to it, and there will be no reaction to the remedy.

2.16 THE VITAL FORCE

Through the process of dilution and potentisation as described above, it follows that there is ultimately no material trace of the original substance left in the remedy. This means that there is indeed an energetic factor involved. Hahnemann concluded that if this were the case and diseases are cured in this fashion, then the disease too must exist on a dynamic plane. So there exists a dynamic life force in every living human being, which he termed the vital force, which is responsible for keeping the body in balance.

The vital force directs all processes of life in the human being. It adapts to environmental influences, creates emotion, causes thought processes and creativity and conducts spiritual inspiration. It acts on the mental, physical and emotional planes to create balance. That part of the vital force responsible for balance during disease is known as the defense mechanism (Vithoukaskas, 1987:28-29).

2.17 VITHOULKAS'S MODEL OF INTEGRATED TOTALITY

Human beings are structured based on a hierarchy consisting of 3 levels, the mental/spiritual, emotional/psychic and physical levels. These levels integrate with each other and therefore influence each other to be healthy or diseased. The mental plane is highest in the hierarchy because it carries out the functions of expression for example, thinking, judging, creating, planning, communicating etcetera. It registers changing in understanding or consciousness in response to internal or external stimuli (Vithoukaskas 1980:25). This plane makes up the essence of the person. If it is deranged for example as in burnout, although the other two levels may be normal, a person cannot function productively.

The emotional plane is next in importance to the mental plane. It is responsible for emotions such as anger, love, joy, sadness, trust etcetera, and is responsible for how humans react to emotional stimuli. Positive feelings have the capacity to create psychic equilibrium and negative feelings have the opposite effect. Many modern problems such as abuse, violence, depression, anxiety etcetera, arise from the emotional level, which creates mismanaged emotional states in response to external influences.

The physical plane is least important in the hierarchy and consists of the physical body and the structures, from the skin to the organs. There exists a hierarchy within the physical plane where some structures are more vital to functioning than others. This can be seen for example where a scar has little effect on the skin, but if it is in the brain, it has a far more damaging effect. A hierarchy also exists in the other two planes where some conditions are more damaging than others, for example on the mental plane schizophrenia is considered to be worse than poor concentration and on the emotional plane, something like irritability for example is worse than suicidal depression (Vithoukias, 1980:23-26).

2.18 THE LAWS OF CURE

As previously established, disease first affects the dynamic plane and thereafter filters through to the mental, emotional and physical planes. Disease can be as a result of an actual bacteria or virus or other external factors in the environment such as pollution, stress etcetera. The progression of the disease depends on the strength of the stimulus and the susceptibility of the individual (Vithoukias, 1980:87).

When the external stimulus is too strong for the vital force, this is when symptoms start to appear. These symptoms are reactions to the stimulus and are attempts by the body to rid itself of the harmful influence (Vithoukias, 1987:100).

There are 4 basic patterns of cure and this indicates to the homoeopath if he is on the right track with the remedy prescribing. Firstly, symptoms disappear from the center to the circumference of the body. This means that symptoms move from the seat of functioning of the person, that is the brain, to the outer or periphery of the body, these being less important organs. Secondly, symptoms travel from above downwards, for example, after treating a person with depression, the depression gets better and he develops indigestion. Thirdly, symptoms go from more vital organs to less vital organs. Finally, symptoms disappear in reverse order of onset (Vithoukias, 1987:104).

2.19 CONSTITUTIONAL TYPE

In homoeopathy, there is the concept of constitutional type, which is the combination of psychological and physical features of the individual and the manner in which they interact with the environment. It is the person's inherited and acquired physical, mental and emotional makeup. Each constitutional type is vulnerable to certain emotional problems and reacts in different ways to these problems. Generally, the emotional feeling is accompanied by physical symptoms and a certain behavioural pattern (Geddes and Lockie, 1995:24).

This behavioural pattern is innate and pre-determined so it makes it impossible for an individual to react differently from their norm to a given situation. A person can only act and react within his or her own limitations. To enforce another way onto them will be met with resistance and make matters worse as a conflict of thoughts and intentions arise within the individual. This implies that an individual can only overcome their pathology and suffering by adapting to their natural constitution or way of behaviour. In order to do this, one needs to be confrontational with one's inner self, to ultimately be more self-accepting and this leads to personal transformation (Whitmont, 1980:38). This confrontation is possible when the body's

own dynamic plane is met with another similar energy vibration, such as the simillimum or constitutional remedy (Whitmont, 1980:39).

2.20 THE SIMILLIMUM REMEDY

When it comes to remedy selection, in order to arrive at the correct remedy, the totality of symptoms needs to be taken into account. This means that all symptoms of the patient, mental, physical and emotional need to be analysed. A homoeopath will refer to the homoeopathic Materia Medica, which is a compilation of all homoeopathic remedies and their symptoms derived from provings. The remedy picture that most accurately matches the patient's symptoms, mentally, physically and emotionally, is then prescribed, based on the law of similars and this remedy is known as the patient's simillimum remedy (Vithoukias, 1987:50). This simillimum remedy helps the individual to strengthen and calm the mind and emotions, thereby enhancing internal coping mechanisms (Souter, 1993:16).

Homoeopathic remedies have no side-effect but it may cause aggravations, which are a slight intensification of the patient's symptoms on the way to cure. This is generally a good sign to the homoeopath indicating that the remedy is working, and an aggravation in most cases is followed by cure (De Schepper, 2001:9).

2.21 THE HOMOEOPATHIC CONSULTATION

In order to differentiate the simillimum a detailed homoeopathic interview is taken. All aspects of a person are taken into account on the basis that each and every individual is unique. Every individual reacts differently to situations and this is a pivotal aspect of homoeopathy and its principles. A homoeopath will examine all the symptoms of the main complaint of the patient and also take into account a host of other details about the patient. These are: fears, physical appearance, food preferences, sleep patterns, general factors such as reactions to seasonal changes and times of the day at which symptoms may worsen or feel better. The most important aspect of the patient for remedy selection is the personality and temperament of the patient, as this varies in each and every individual. Another important aspect is family history and diseases prevalent in the family. This gives an indication of what diseases the patient may be susceptible to (Geddes and Lockie. 1995:24).

2.22 PREVIOUS RESEARCH ON SIMILLIMUM TREATMENT

Ismail (2003) conducted a placebo-controlled study to evaluate the efficacy of homoeopathic simillimum treatment of patients suffering from chronic sinusitis. The sample number was 30 and there were 2 groups of 15. Results of the study showed no statistical difference between the 2 groups so it was concluded that simillimum treatment was not effective in the treatment of sinusitis. No statistical difference was noted.

Louw (2003) researched the efficacy of homoeopathic simillimum treatment of patients suffering from dysthemic and adjustment disorder. It was a double blind placebo controlled study with a sample group of 16. Results of the study showed that there was improvement in both the treatment and placebo group with regards to treating the extent of depression and perception levels, however, homoeopathic

treatment alone proved to be effective in treating and causing changes at the belief level. No statistical difference was noted.

Rademan (1997) conducted a double blind placebo controlled study into simillimum treatment of irritable bowel syndrome sufferers. The sample size was 30 and the group was randomly divided into 2. The results of the study showed that simillimum treatment was effective in decreasing the symptoms of irritable bowel syndrome and its clinical picture. No statistical difference was noted.

Lilley (1997) researched the efficacy of homoeopathic simillimum treatment of recurrent headaches. It was a double blind placebo controlled study with a sample group of 30, randomly divided into 2 groups of 15 each. Results showed simillimum treatment was more effective in treating headaches than placebo. No statistical difference was noted.

2.23 HOMOEOPATHY AND BURNOUT

In South Africa, burnout is certainly gaining ground due to various factors. As a country, South Africa is undergoing major changes both politically and socio-economically and this filters down to the workplace. Furthermore, South Africa at the moment is fighting the AIDS battle. Health care staff face a tremendous amount of stress and emotional drain as they constantly have to deal with patients who are nearing death. They also have to deal with poor working conditions. Most health care staff thus face the prospect of burnout (van Dyk, 2001:282-288).

To date, no research on the homoeopathic treatment of burnout has been done and homoeopathy may prove to be one of the ways in which burnout can be treated. This is due to the fact that homoeopathy works on a deeper, mental/emotional level, and even on the physical level, as described earlier, therefore covering all aspects of burnout. Homoeopathy is a form of medicine that

treats holistically, without causing side-effects. The individuals simillimum remedy will act both curatively and preventatively by helping to strengthen internal coping mechanisms (Geddes and Lockie 1995:24) This approach to treatment may very well treat and prevent burnout.

CHAPTER 3

RESEARCH AND STATISTICAL METHODS

3.1 SELECTION OF PARTICIPANTS

The method of sampling used was convenience sampling. Volunteers were obtained through advertisements distributed at local health shops, pharmacies, local sports clubs, libraries and in local newspapers. The study was a double blind placebo-controlled study. Altogether, 30 participants were selected for the study, based on the inclusion and exclusion criteria listed below. The participants were randomly divided by the supervisor into treatment and placebo groups (*Appendix E*). The placebo group consisted of 16 participants and the treatment group consisted of 14 participants. The participants either received simillimum or placebo according to the randomisation sheet drawn up by the supervisor. The participants on placebo, though they did not receive medication, did have the benefit of a homoeopathic consultation, which in itself is regarded as therapeutic, as patients get to talk about their problems confidentially. On completion, the study was unblinded, and the researcher learnt which patients received treatment and which received placebo. Those on placebo were then given simillimum treatment.

3.2 INCLUSION AND EXCLUSION CRITERIA

In order to qualify to participate in the study, participants had to be screened according to certain inclusion and exclusion criteria.

3.2.1 INCLUSION CRITERIA

- Participants were between the ages of 18-60.
- Participants had a full time job in the human services field. The human services field incorporates professions such as teachers, doctors, nurses, hospital staff, emergency service workers, social workers, psychologists, mental hospital staff, counselors, attorneys, lawyers, policemen, bank workers, librarians, administrative staff and those involved in marketing and sales.
- Participants were literate in English.
- Participants exhibited signs and symptoms of burnout, that is, emotional exhaustion, depersonalisation and reduced personal accomplishment, intense weariness often combined with an inability to sleep, decreased energy, chronic fatigue, recurrent colds, headaches, gastro-intestinal tract disturbances, shortness of breath general aches and pains, depression, hopelessness, irritability, weeping, anger outbursts and sadness.

3.2.2 EXCLUSION CRITERIA

- Pregnant females were excluded as symptoms produced during pregnancy are not characteristic symptoms of the patient, but occur for the duration of the pregnancy.
- Participants did not have a recent history (over the past 3 months) of the use of barbiturates, tranquillisers, anti-depressants and recreational drugs. Herbal preparations for insomnia and depression were also prohibited.
- Participants did not change their lifestyle during the research period including extensive leave, stress relief programmes etcetera.

3.3 BOOKING OF APPOINTMENTS

Appointment bookings were done by the receptionist at the Homoeopathic Day Clinic at Durban Institute of Technology. Each participant was allocated a number according to the randomisation sheet and appointments were made accordingly. Before selection, participants were given the subject information letter to read, and if willing to participate and they met the criteria, they were given a consent form to sign.

3.4 PREPARATION OF EXPERIMENTAL MEDICINES

Medicated granules were produced in accordance with method 10 (*Appendix F*) of the German Homoeopathic Pharmacopoeia (British Homoeopathic Association, 1991) by the laboratory technician at the Durban Institute of Technology's Homoeopathic Day Clinic.

3.4.1 PREPARATION OF SIMILLIMUM REMEDY

- Lactose granules were medicated at 1% v/v with the 30CH of the simillimum.
- 10 of these granules were then added to a 25ml bottle containing 18ml of distilled water and 2ml of 96% alcohol, to make up 20ml.
- The bottle was succussed 10 times to create the 30CH plussed potency.
- Each participant from the treatment group was given one 25ml bottle of their particular remedy. One bottle was measured to last a month.

3.4.2 PREPARATION OF PLACEBO

- 10 unmedicated lactose granules were added to a 25ml bottle containing 18ml of distilled water and 2ml of 96% alcohol, to make up 20ml.
- The bottle was succussed 10 times to maintain the same standard of remedy preparation as the treatment group.
- Each participant from the placebo group was given one 25ml bottle. One bottle was measured to last a month.

3.5. CONSULTATIONS

Consultations were conducted at the Homoeopathic Day Clinic at the Durban Institute of Technology. Qualified homoeopaths supervised consultations. The researcher was available to patients at all times if a patient needed help at any point in the trial.

3.5.1. FIRST CONSULTATION

- This began as soon as the subject information letter (*Appendix C*) was read and the consent form (*Appendix D*) was signed.
- During this consultation, the researcher took a full homoeopathic case history and performed a physical examination (*Appendix B*).
- Participants completed the Maslach Burnout Inventory-Human Services Survey (Maslach, Jackson and Leiter, 1996:43). Participants were then sent to the clinic reception area to collect their medication, once the case had been discussed with the clinician on duty.
- Medication was dispensed to the respective groups according to the randomisation sheet by the laboratory technician. Only the laboratory technician knew who was getting placebo and who was getting treatment.

- Participants were instructed to succuss the bottle 10 times before taking 10 drops in 1cm of water 30 minutes before breakfast.
- Participants were asked to return after 4 weeks for the second consultation and an appointment was booked.

3.5.2 SECOND CONSULTATION

- During this consultation, participants completed the Maslach Burnout Inventory-Human Services Survey for the second time.
- The researcher conducted a follow up consultation.
- The researcher either continued treatment with the same remedy or changed the remedy, depending on the participants response to it within the first 4 weeks.
- Patients received their second bottle of treatment.
- They were instructed to return after 4 weeks for their final consultation.

3.5.3 THIRD CONSULTATION

- During this consultation, patients completed the Maslach Burnout Inventory-Human Services Survey for the final time.
- Another follow-up case was taken.

3.6 STATISTICAL ANALYSIS

Statistical Analysis was conducted using the SPSS (version 9) software suite. This statistical software program is manufactured by SPSS Inc, 444N. Michigan Avenue, Chicago, Illinois, USA. Various Descriptive and Inferential Statistical techniques were used. The descriptive procedures used were various tables and graphs and a few summary statistics including, but not limited to, means, proportions and percentages. Inferential Statistics included various hypothesis testing techniques. Due to the size of the sample group, non-parametric statistical tests were utilised. All tests set the type 1 error at 5%, or mentioned

differently, $\alpha = 0.05$. If the p value was reported as less than 0.05, it was declared a significant result and a null hypothesis was rejected.

3.6.1 PROCEDURE 1 : WILCOXON'S SIGNED RANK TEST

(Intra-Group Tests for Treatment Group and Placebo Group)

Wilcoxon's signed rank test was conducted based on readings from the Maslach Burnout Inventory-Human Services Survey. It tested for a significant difference in population means between readings within the Treatment Group and the Placebo Group.

(i) Hypothesis Testing

The null hypothesis H_0 , states that there is no significant difference between the three consults being compared at the $\alpha = 0.05$ level of significance. The alternative hypothesis H_1 , states that there is a significant difference between the three visits being compared.

(ii) Decision Rule

At the $\alpha = 0.05$ level of significance, the null hypothesis is rejected if $p \leq \alpha$ where p is the observed significance level. Otherwise the null hypothesis is accepted at the same level of significance.

3.6.2 PROCEDURE 2: MANN – WHITNEY TEST

(Inter-Group Tests between both Groups)

The inter-group analysis was done using the Mann-Whitney non-parametric Test. This testing process was used to determine if any significant differences occurred between both population means, in other words if one treatment reflected a significantly different rate of change than the other treatment across each pair of subsequent readings. The treatment and placebo groups were compared to each other with regards to scores on the three subscales of the Maslach Burnout Inventory, namely Emotional Exhaustion, Depersonalisation and Reduced Personal Accomplishment. Scores between groups were compared at baseline, follow-up 1 and follow-up 2 readings.

(i) Hypothesis Testing

The null hypothesis H_0 , states that there is no significant difference between the three consults being compared at the $\alpha = 0.05$ level of significance. The alternative hypothesis H_1 , states that there is a significant difference between the three visits being compared.

(ii) Decision Rule

At the $\alpha = 0.05$ level of significance, the null hypothesis is rejected if $p \leq \alpha$ where p is the observed significance level. Otherwise the null hypothesis is accepted at the same level of significance.

3.6.3. PROCEDURE 3: COMPARISON USING BAR CHARTS

Analytical findings were summarized in visual form by construction of bar charts to compare readings of Treatment and Placebo Group with respect to scores given for the measurement tool. Bar charts were placed after the appropriate tables. Bar charts were also used to explain mean scores at each consultation for the 3 subscales of emotional exhaustion, depersonalisation and personal accomplishment.

CHAPTER 4

RESULTS

4.1 DEMOGRAPHIC DATA

4.1.1 GENDER

There were 30 participants in the study, consisting of 7 males (23%) and 23 females (77%).

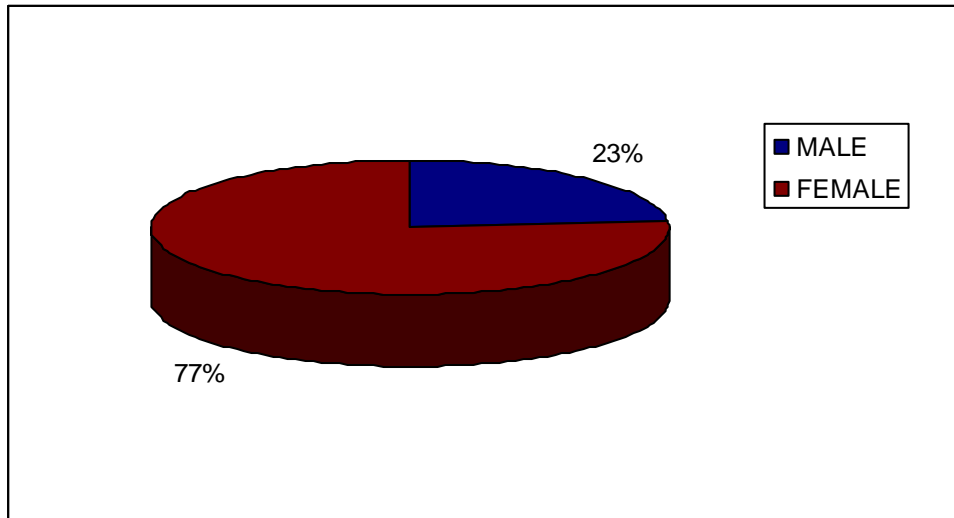


Figure 4.1 Pie Chart: Percentage of Male and Female participants.

4.1.2 AGE

The study consisted of participants between 18 and 60 years of age. There was 1 participant (3%) between the ages of 20 – 30 and 11 participants (37%) between the ages of 30 – 40. 10 participants (33%) were between the ages of 40 – 50 and 8 participants (27%) were between the ages of 50 – 60.

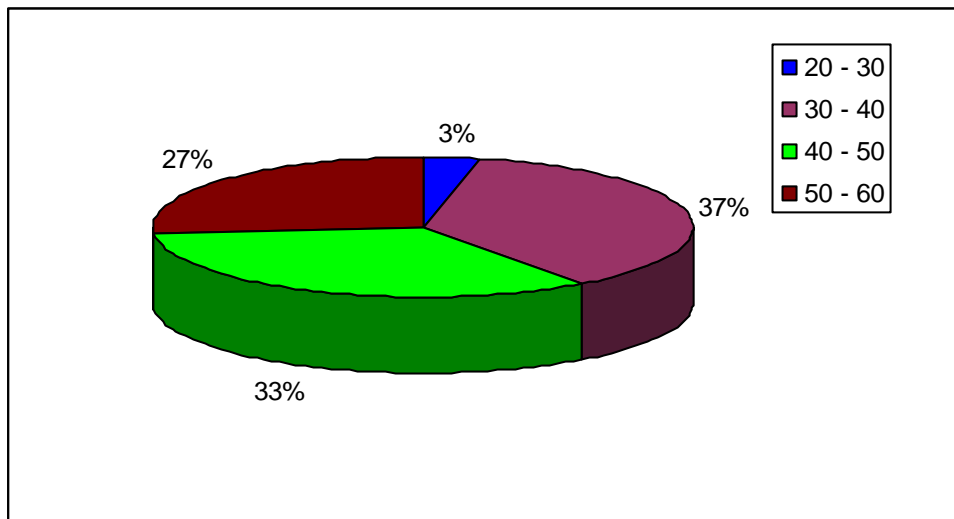


Figure 4.2 Pie Chart: Percentage of Age Groups

4.1.3 OCCUPATIONS

The study consisted of participants from the human services fields. 9 participants (30%) were teachers, 8 participants (26%) were sales representatives, 5 participants (16%) were nurses, 4 participants (13%) were in the human resources field, 2 participants (6%) worked for a bank, 2 participants (6%) were social workers and 1 participant (3%) was a member of the police force.

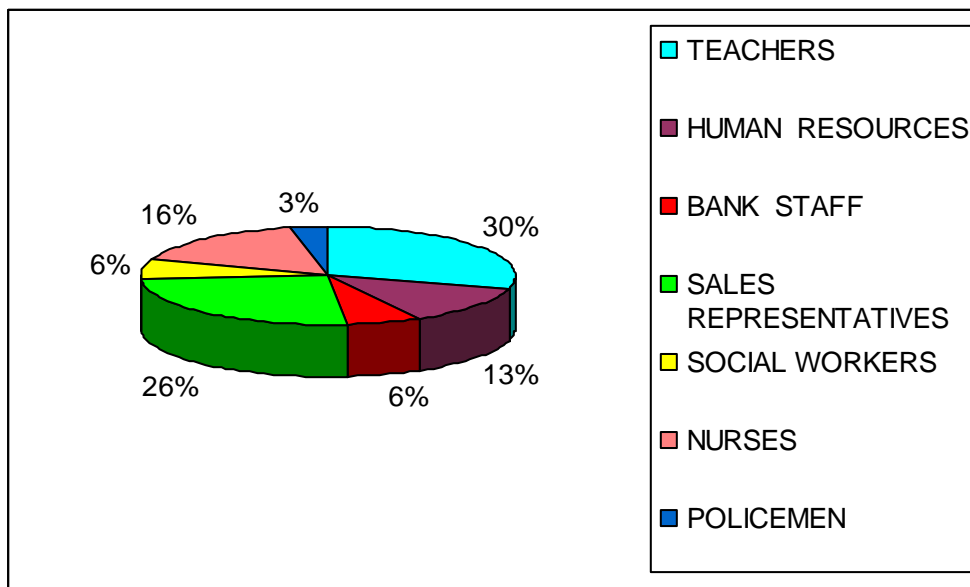


Figure 4.3 Pie Chart: Percentage of Occupations

4.1.4 MARITAL STATUS

Of the 30 participants, 3 participants (10%) were single, 5 participants (17%) were divorced and 22 participants (73%) were married.

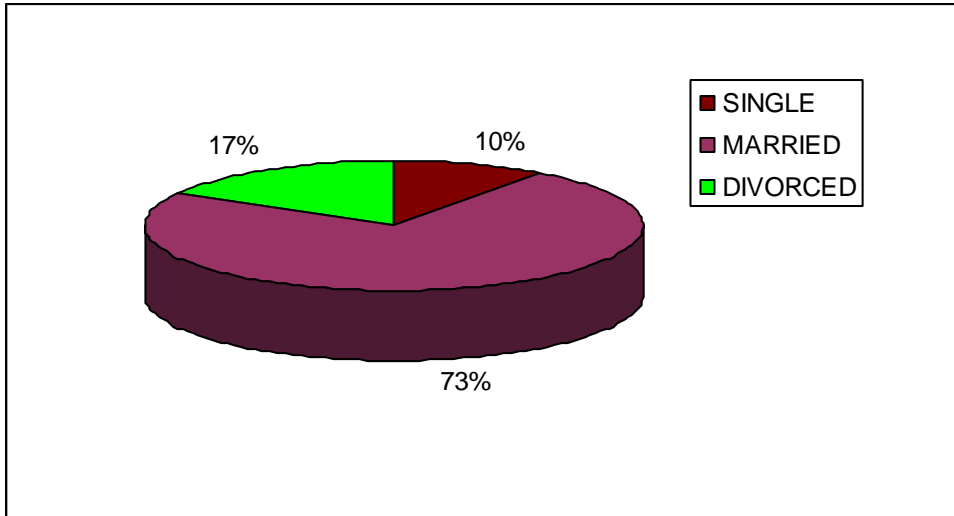


Figure 4.4 Pie Chart: Marital Status Percentages

4.2 PROCEDURE 1 (INTRA-GROUP): WILCOXON SIGNED RANKS TEST

4.2.1 MASLACH BURNOUT SURVEY (*Appendix A*)

Table 4.1: Comparison of scores for Emotional Exhaustion between baseline and follow up 1, follow up 2 and follow up 1, and follow up 2 and baseline.

GROUP	FU1 - BASELINE	FU2 - FU1	FU2 - BASELINE
Treatment (p value)	.167	.021	.008
Placebo (p value)	.001	.005	.001

Table 4.1 reveals the following:

Treatment Group: There was a significant difference between follow up 2 and follow up 1, and follow up 2 and baseline.

Placebo Group: There was significant differences between follow up 1 and baseline, follow up 2 and follow up 1, and follow up 2 and baseline.

Table 4.2: Comparison of scores for Depersonalisation between baseline and follow up 1, follow up 2 and follow up 1, and follow up 2 and baseline.

GROUP	FU1 - BASELINE	FU2 - FU1	FU2 - BASELINE
Treatment (p value)	.806	.008	.020
Placebo (p value)	.020	.068	.002

Table 4.2 reveals the following:

Treatment Group: There was a significant difference between follow up 2 and follow up 1, and follow up 2 and baseline.

Placebo Group: There was a significant difference between follow up 1 and baseline, and follow up 2 and baseline.

Table 4.3: Comparison of scores for Personal Accomplishment between baseline and follow up 1, follow up 2 and follow up 1, and follow up 2 and baseline.

GROUP	FU1 - BASELINE	FU2 - FU1	FU2 - BASELINE
Treatment (p value)	.503	.011	.197
Placebo (p value)	.036	.050	.003

Table 4.3 reveals the following:

Treatment Group: There was a significant difference between follow up 2 and follow up 1.

Placebo Group: There was significant differences between follow up 1 and baseline, and follow up 2 and baseline.

4.3 PROCEDURE 2 (INTER-GROUP): MANN-WHITNEY TEST

Table 4.4: Comparison of scores between treatment and placebo groups at baseline, follow up 1 and follow up 2

EE BLINE	EE FU1	EE FU2	Dp BLINE	Dp FU1	Dp FU2	PA BLINE	PA FU1	PA FU2
.967	.787	.967	.900	.019	.047	.025	.834	.588

Table 4.4 reveals the following:

Emotional Exhaustion: There were no significant differences ($p > 0.05$).

Depersonalisation: There was a significant difference at follow up 1 and follow up 2 ($p < 0.05$).

Personal Accomplishment: There was a significant difference at baseline ($p < 0.05$). This is because at baseline the treatment group had a lower level of personal accomplishment than the placebo group.

4.4 BAR CHARTS COMPARING MEANS FOR SUBSCALES

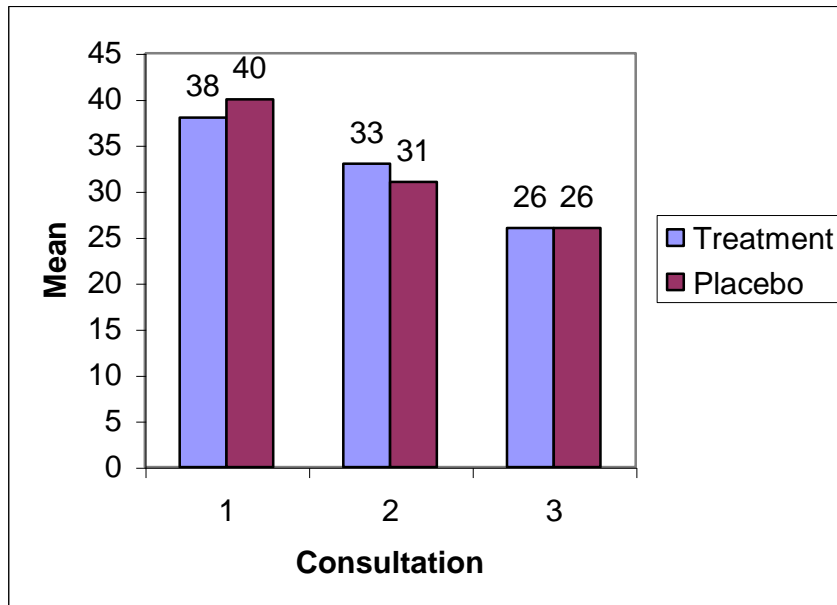


Figure 4.5 Bar Chart: Mean scores for Emotional Exhaustion

Figure 4.5 reveals that at baseline, emotional exhaustion levels were higher in the placebo group. Scores decreased at the second consultation, showing improvement in emotional exhaustion. By the third consultation, the emotional exhaustion levels were equal for both groups, showing the same level of improvement.

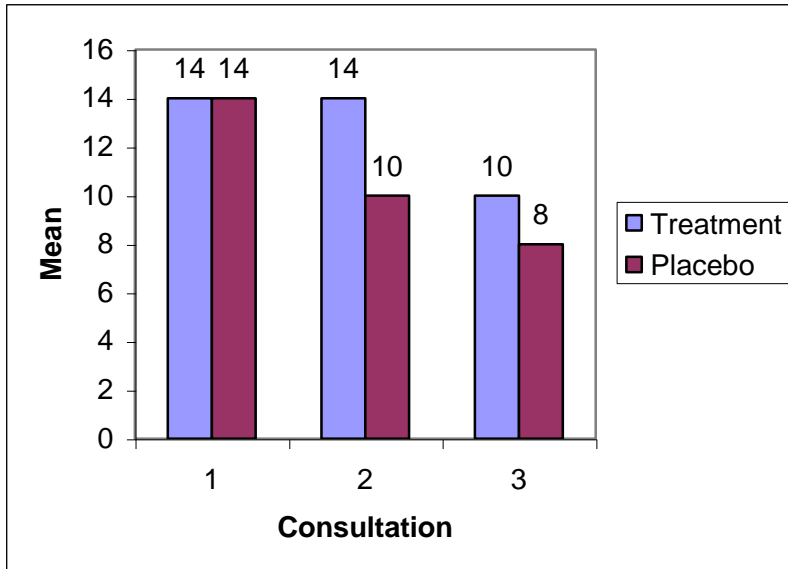


Figure 4.6 Bar Chart: Mean scores for Depersonalisation

Figure 4.6 reveals that mean scores for depersonalisation at baseline were equal. At consultation two, depersonalisation scores for the treatment group were stable and the placebo group showed an improvement. By the third consultation, the placebo group showed a slightly greater improvement in depersonalisation levels than the treatment group.

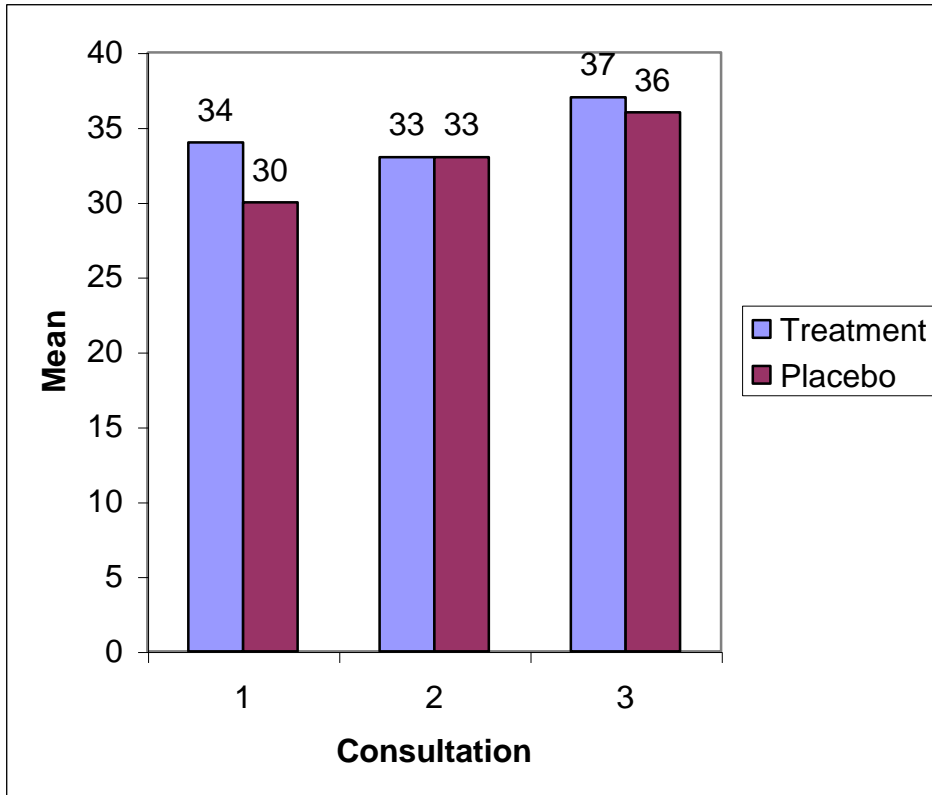


Figure 4.7 Bar Chart: Mean scores for Personal Accomplishment

Figure 4.7 reveals that at baseline mean scores for personal accomplishment were higher for the treatment group. At consultation two, scores for both groups were equal, with the treatment group showing an increase and thus, an improvement in personal accomplishment levels. By the third consultation, personal accomplishment mean scores for both groups had increased, showing an improvement in this subscale.

4.5 LEVEL OF BURNOUT

The following pie charts represent the level of burnout at each consultation for participants from both groups. Burnout is rated as being high, average or low according to the scores on the Maslach Burnout Inventory. A high degree of burnout is indicated by high scores on the emotional exhaustion and depersonalisation scale, and a low score on the personal accomplishment scale. An average degree of burnout is reflected by average scores on all three subscales. A low degree of burnout is reflected by low scores on the emotional exhaustion and depersonalisation subscales, and a high score on the personal accomplishment scale. The numerical cut off points are listed in Chapter 2.

4.5.1 PLACEBO GROUP

CONSULTATION ONE

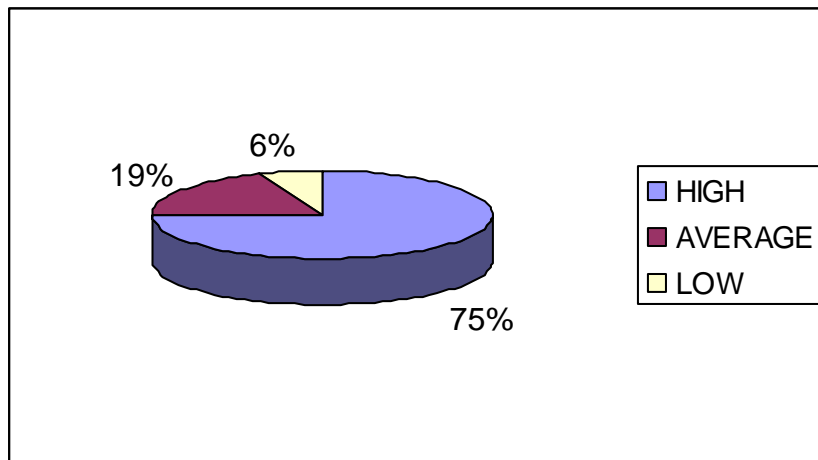


Fig 4.8 Pie chart: Percentages of level of burnout at consultation one (baseline).

Figure 4.8 reveals that at baseline, 75% of participants from the placebo group had a high degree of burnout, 19% had an average degree of burnout and 6% had a low degree of burnout

CONSULTATION 2

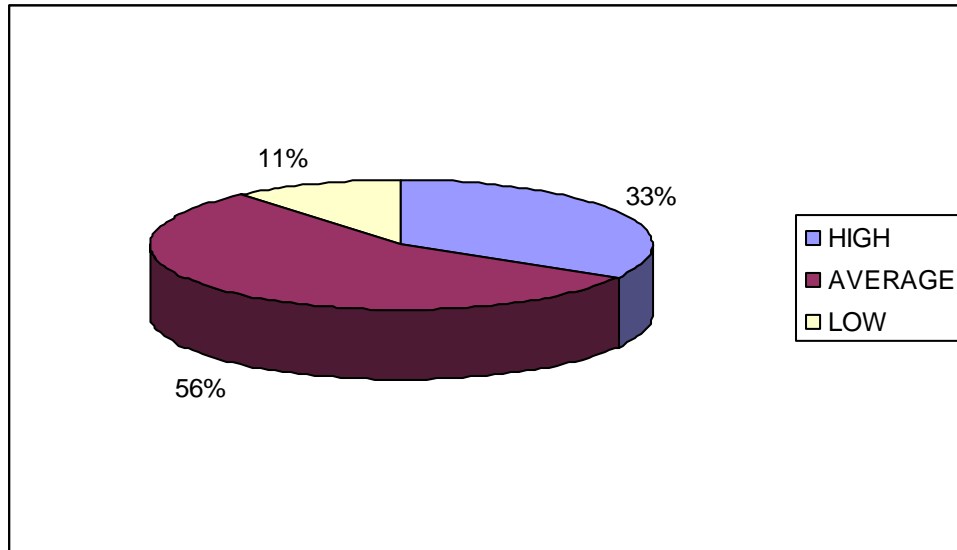


Fig 4.9 Pie chart: Percentages of level of burnout at consultation two (follow up 1).

Figure 4.9 reveals that at consultation two, 33% of participants from the placebo group had a high degree of burnout, 56% had an average degree of burnout and 11% had a low degree of burnout, thus showing an improvement in burnout levels.

CONSULTATION 3

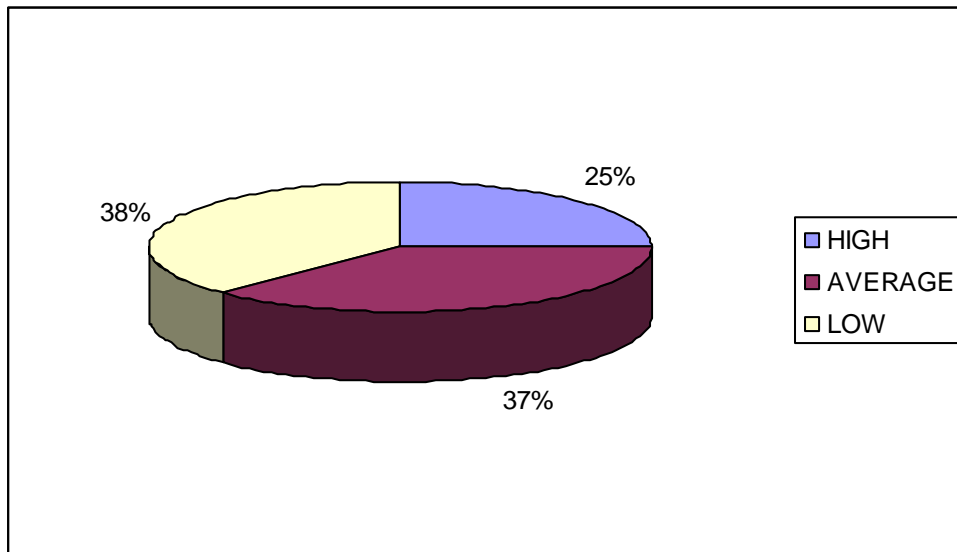


Fig 4.10 Pie chart: Percentages of level of burnout at consultation three (follow up 2).

Figure 4.10 reveals that at the final follow up, 25% of participants from the placebo group showed a high degree of burnout, 37% had an average degree of burnout and 38% had a low degree of burnout. This shows an overall improvement of burnout levels from baseline to the final follow up.

4.5.2 TREATMENT GROUP

CONSULTATION ONE

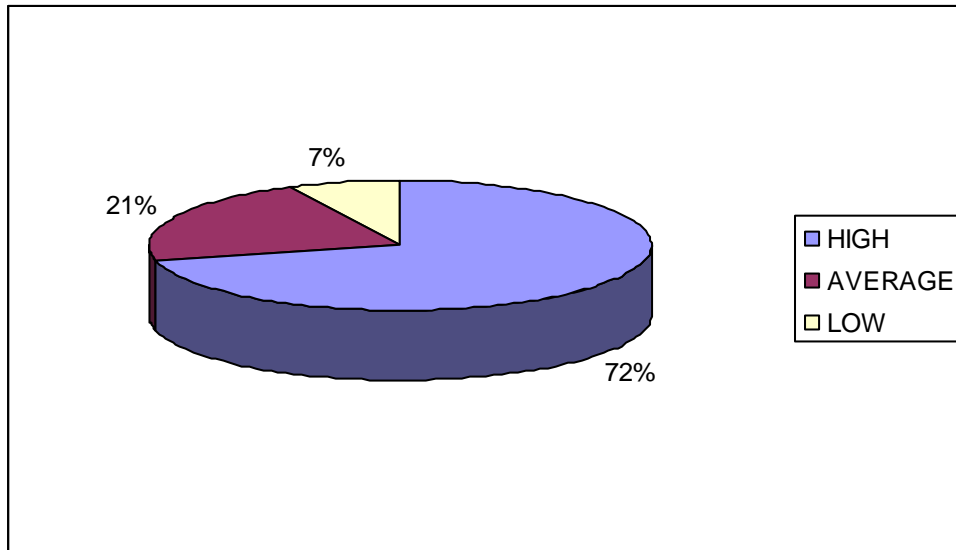


Fig 4.11 Pie chart: Percentages of level of burnout at consultation one (baseline).

Figure 4.11 reveals that at baseline, 72% of participants from the treatment group had a high degree of burnout, 21% had an average degree of burnout and 7% had a low degree of burnout.

CONSULTATION 2

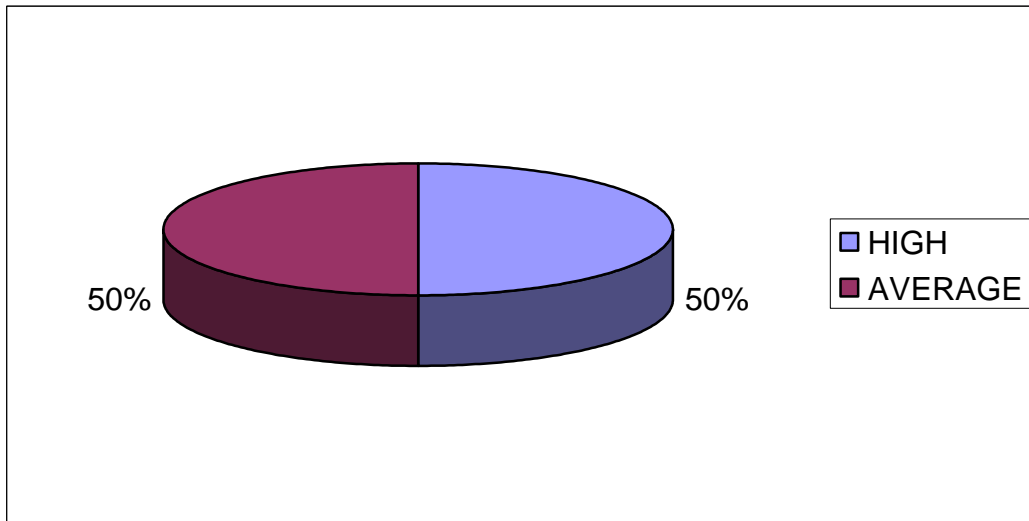


Fig 4.12 Pie chart: Percentages of level of burnout at consultation two (follow up 1)

Figure 4.12 reveals that at consultation 2, 50% of participants from the treatment group had a high degree of burnout and 50% of participants had an average degree of burnout. The percentage of participants having a high degree of burnout had decreased and the percentage of participants having an average degree of burnout had increased.

CONSULTATION 3

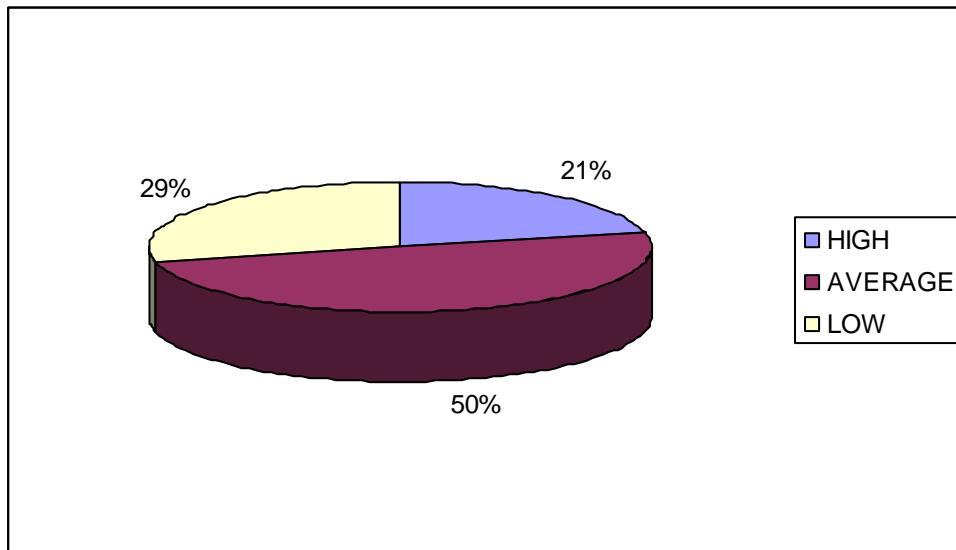


Fig 4.13 Pie chart: Percentages of level of burnout at consultation three (follow up 2).

Figure 4.13 reveals that at consultation three, 21% of participants from the treatment group had a high degree of burnout, 50% of participants had an average degree of burnout and 29% of participants had a low degree of burnout, thus showing an improvement in burnout from baseline to consultation three.

4.6 COMMON BURNOUT SYMPTOMS AMONG PARTICIPANTS

4.6.1 Mental Symptoms

Decreased Tolerance and Anger Outbursts	43%
Suppressing Anger	43%
Mood Swings and averse to company	37%
Decreased motivation	33%
Frustration	30%
Irritability	30%
Hopelessness and Apathy	20%
Decreased Self-Esteem	16%
Perfectionist	37%
Depression	37%
Weepy and Emotional	30%

Table 4.5: Most common mental symptoms among participants

4.6.2 Physical Symptoms

Lethargy	57%
Hypertension	47%
Recurring Headaches	43%
Insomnia	37%
Decreased Concentration	23%
Decreased Memory	10%

Table 4.6: Most common physical symptoms among participants

4.7 HOMOEOPATHIC REMEDIES PRESCRIBED

4.7.1 TOTAL HOMOEOPATHIC REMEDIES PRESCRIBED

Remedies were prescribed at the first two consultations for each participant therefore remedies were prescribed a total of 60 times. The following is a representation of total remedies prescribed in the study.

Thuja occidentalis	2
Lachesis mutus	2
Phosphorus	5
Sepia officinalis	8
Cocculus indicus	2
Delphinium staphysagria	5
Natrum muriaticum	7
Graphites	2
Pulsatilla nigricans	3
Magnesium muriaticum	2
Carcinosin	4
Medhorrinum	2
Palladium	2
Calcarea carbonica	1
Nux vomica	1
Ignatia amara	2
Natrum carbonicum	1
Phosphoricum acidum	2
Magnesium carbonicum	1
Causticum	3
Argentum nitricum	2
Anacardium orientale	1

Table 4.7: Total remedies prescribed throughout the study.

Table 4.7 reveals that the 5 most frequently prescribed remedies in the study were *Sepia officinalis*, *Natrum muriaticum*, *Delphinium staphysagria*, *Phosphorus* and *Carcinosin*.

4.7.2 REMEDIES PRESCRIBED IN THE TREATMENT GROUP

<i>Thuja occidentalis</i>	2
<i>Lachesis mutus</i>	2
<i>Phosphorus</i>	2
<i>Sepia officinalis</i>	1
<i>Cocculus indica</i>	2
<i>Staphysagria</i>	1
<i>Natrum muriaticum</i>	1
<i>Graphites</i>	2
<i>Pulsatilla nigricans</i>	1
<i>Magnesium muriaticum</i>	2
<i>Carcinosin</i>	2
<i>Medhorrinum</i>	2
<i>Palladium</i>	2
<i>Calcarea carbonica</i>	1
<i>Nux vomica</i>	1
<i>Ignatia amara</i>	2
<i>Natrum carbonicum</i>	1

Table 4.8: Remedies prescribed in the treatment group

4.7.3 REMEDIES PRESCRIBED IN THE PLACEBO GROUP

Phosphoricum acidum	2
Natrum muriaticum	6
Phosphorus	3
Delphinium staphysagria	4
Magnesium carbonicum	1
Causticum	3
Sepia officinalis	7
Pulsatilla nigricans	1
Argentum nitricum	2
Carcinosin	2
Anacardium	1

Table 4.9: Remedies prescribed in the Placebo Group

Table 4.9 reveals that the 3 most frequently prescribed remedies in the placebo group were Sepia officinalis, Delphinium staphysagria and Natrum muriaticum.

CHAPTER 5

DISCUSSION

The purpose of this double blind placebo controlled study was to evaluate the efficacy of a homoeopathic simillimum in the treatment of job burnout in the human services field. The measurement tool used was the Maslach Burnout Inventory – Human Services Survey. The Survey consists of a series of questions and is subdivided into 3 subscales, Emotional Exhaustion, Depersonalisation and Personal Accomplishment. These 3 subscales represent the 3 main aspects of the burnout syndrome.

Table 4.1 shows the intra-group analysis for the emotional exhaustion subscale. In the treatment group there was a significant difference between follow up 2 and follow up 1, and follow up 2 and baseline. In the placebo group there were significant differences between follow up 1 and baseline, follow up 2 and follow up 1, and follow up 2 and baseline. As can be seen from Figure 4.5, the average scores for emotional exhaustion in the treatment group at baseline, follow up 1 and follow up 2 was 38, 33 and 26 respectively. For the placebo group, the average scores at baseline, follow up 1 and follow up 2 were 40, 31 and 26 respectively. This implies that there was an improvement in the emotional exhaustion levels for both groups.

Table 4.2 shows the intra-group analysis for the depersonalisation subscale. In the treatment group there was a significant difference between follow up 2 and follow up 1, and follow up 2 and baseline. In the placebo group there was a significant difference between follow up 1 and baseline, and follow up 2 and baseline. As can be seen from Figure 4.6, the average scores for depersonalisation in the treatment group at baseline, follow up 1 and follow up 2 was 14, 14 and 10 respectively. The average scores for the placebo group at baseline, follow up 1 and follow up 2 were 14, 10 and 8 respectively. This implies

that there was an improvement in depersonalisation levels for both groups, with the placebo group showing a greater and earlier improvement than the treatment group.

Table 4.3 shows the intra-group analysis for the personal accomplishment subscale. In the treatment group there was a significant difference between follow up 2 and follow up 1. In the placebo group there was a significant difference between follow up 1 and baseline and follow up 2 and baseline. As can be seen from Figure 4.7, the average scores for personal accomplishment for the treatment group at baseline, follow up 1 and follow up 2 was 34, 33 and 37 respectively. In the placebo group, the average scores at baseline, follow up 1 and follow up 2 were 30, 33 and 36 respectively. This implies that there was an improvement in personal accomplishment levels for both groups, with the placebo group showing a slightly greater improvement. The treatment group showed a slight worsening of this subscale at follow up 1 but showed an improvement almost equal to the placebo group by follow up 2.

Table 4.4 show the inter-group analysis of the 3 subscales at baseline, follow up 1 and follow up 2. In the emotional exhaustion subscale, there were no significant differences between both groups, implying that both groups improved equally. In the depersonalisation subscale there was a significant difference at follow up 1 and follow up 2, with the placebo group showing a greater improvement. For the personal accomplishment subscale there was a significant difference at baseline, with the treatment group showing a higher level of reduced personal accomplishment. At follow up 1 and follow up 2, the p value was greater than 0.05, which statistically showed no significant difference in scores at these 2 consults.

Figures 4.8 - 4.12 show the level of burnout at each consultation for both treatment and placebo groups. In both groups the level of burnout had improved over each consultation.

As can be seen, there was an improvement in both groups showing that the placebo effect was just as great as the effect of a homoeopathic simillimum in this study. Many of the symptoms of burnout arise from the mental and emotional spheres. Statistically, both groups showed an improvement in burnout levels. This may be due to the fact that a homoeopathic consult in itself is therapeutic due to its nature. Patients were given the opportunity to talk about how they were feeling and thus vent their frustration. Throughout the study, participants admitted that after the consult they felt less stressed as it was the first time they had spoken about what their burnout felt like.

The type of interaction between doctor and patient brings about the placebo effect. The physician's attributes, dress, demeanour, voice and body language each contribute to a marked placebo effect (Pearce, 1995). Based on the results of this study, it can be concluded that there was a marked placebo effect and that both simillimum and placebo were equally effective in treating burnout.

Tables 4.11 and 4.12 show the common symptoms of burnout found amongst participants of this study. These symptoms correlate with the signs and symptoms of burnout, discussed earlier in Chapter 2. This study revealed that burnout is most common amongst people between the ages of 30 – 40. This finding was not consistent with the demographic data regarding the age at which burnout is most likely to occur, discussed in Chapter 2. According to the demographic causes of burnout, married people are less likely to develop burnout because their spouse would act as a support system. This is contradictory with the findings of this study where 73% of participants were married, of which a certain percentage were experiencing troubled marriages due to burnout, which further contributed to the development and progression of burnout in these participants.

Figure 4.11 reveals the most common homoeopathic remedies prescribed during this study. Due to the fact that burnout is such an emotional and mental

syndrome, it would be interesting to discuss the mental picture of these remedies keeping in mind the theoretical causative factors of burnout discussed in Chapter 2.

The most common remedies prescribed in this study were *Sepia officinalis*, *Natrum muriaticum*, *Delphinium staphysagria*, *Phosphorus* and *Carcinosinum*.

Sepia officinalis is a remedy belonging to the animal kingdom and is made from the inky juice of the cuttlefish. The main feeling in this remedy is of being forced to undertake things opposed to her intentions and forced to accept situations against her will because of her feeling of not being good enough (Sankaran, 1997: 170). This is a predominantly female remedy in which the individual is trying to find a balance between domestic life and achieving in her career, but added to this is her need to be perfect in both areas of her life. It is said that *Sepia* can be a great career woman or a dedicated housewife. A state of collapse occurs when she cannot keep the balance anymore and life gets all too much for her to handle. In this situation, *Sepia* develops the mental symptoms of 'stasis' where she has confusion, absent-mindedness, dullness and difficult thinking. They also develop an indifference to their loved ones and prefer to be left alone. All relationships seem like a drain on her reserves of energy and can act as an obstacle to her need for privacy and independence. She develops a negative attitude and is always nagging, complaining and dissatisfied. They can also be very defensive and weepy (Vermeulen, 2002:1228). As can be seen from the above, many of the symptoms of burnout are reflected in this remedy. These individuals will develop burnout due to a lack of satisfaction and achievement in their career, being forced to do a job they don't want to do or in their minds, failing to create the delicate balance between family and career. In these individuals, it is likely that a reduced sense of personal accomplishment and depersonalisation would be more prominent.

Natrum muriaticum is a remedy belonging to the mineral kingdom and is more commonly known as table salt. It is a well-known remedy for the ill effects of some form of grief, betrayal or upset (Boericke, 1998:459). The main feeling of this remedy is that they will be let down by someone that they trust. As a result of this fear, they are reserved and unapproachable but at the same time, they fear being alone. There is a delusion that there is something wrong with them (physically in terms of appearance or mentally in terms of intelligence) or that they have not done enough to prove their worth. For this reason, they go out of their way to be caring and nurturing to others, but when hurt they withdraw completely and there is great sadness. They become bitter, angry, irritable and hateful. They dwell on the incident that has caused them hurt and may become revengeful. Like Sepia, they want to be alone (Sankaran, 1997:144). The typical Natrum muriaticum person is very serious and responsible and also very sympathetic, so much so that they absorb the other's grief and problems and brood over it silently. They always appear objective and controlled and will never share their emotions. They are described as having a wall around them (Vermeulen, 2002:964). So in these individuals burnout will occur as a result of conflict and betrayal in relationships with their colleagues, unfulfilled promises in the workplace and criticism at work. In these individuals emotional exhaustion and depersonalisation would be more prominent.

Delphinium staphysagria is a remedy belonging to the plant kingdom. These individuals are morbidly sensitive. They set themselves up for a task that is nearly impossible to achieve, but feel they have to in order to maintain their dignity despite being beaten down or insulted (Sankaran, 1997:186). The main feeling in this remedy is an intense sense of pride and honour, which makes them appear haughty. They develop this feeling through their fear that others will see their weakness and thereby get power over him. They like to be superior to others and develop an anxiety of control; they must either control or they will be controlled. Pride, arrogance and tremendous ambition are characteristic of this remedy. They feel they are too dignified to fight and will never retaliate. Instead,

they keep quiet about it and suffer in silence while still being in control. They become irritable and fatigued when they have to control their emotions. They have a great aversion to authority and are very sensitive to the rudeness of others, yet they accept authority to an extreme degree. They also may develop some kind of addiction as an outlet to the suppressed emotion. Eventually, it becomes too much to keep the control and they start falling apart. This is when burnout will develop. The suppressed anger starts to surface and there are signs of trembling, violence and rage. He may eventually throw away all his reputation and honour that he tried so hard to maintain (Sankaran, 1997:187). So in these people burnout may develop due to extreme authority in the workplace, decreased autonomy in the workplace and conflict in the workplace. In these individuals, it is likely that emotional exhaustion and reduced personal accomplishment would be prominent.

Phosphorus is a remedy belonging to the mineral kingdom. The main feeling is that they are unloved and uncared for. As a result, they become affectionate, friendly and sympathetic in the hope that this love will be reciprocated. They are very sensitive to the feelings of others in order to win their affection (Sankaran, 1997:161). They often draw attention to themselves, mostly by their extroverted nature. They are often too open and impressionable, easily distracted but very perceptive. They are also described as being self-centred because they consider themselves to be more sensitive, caring and loving than others. Through their animated and intense nature, they become fatigued very suddenly. This is when they become tired and indifferent and just want to rest. Their memory weakens and they become apathetic, indolent and dull (Sankaran, 1997:162). These individuals may develop burnout due to a drain on emotional reserves through constant caring for others as in counselling, nursing etc. These individuals are those that reach a burnt out state suddenly and literally do not get out of bed for days and may be hospitalised. In these individuals, emotional exhaustion is likely to be the most prominent symptom of burnout.

Carcinosinum is prepared from cancerous breast tissue and represents the cancer miasm. The main feeling is that one's survival depends upon performing tasks which one feels incapable of performing. These people often have a history of taking on too much at a young age, having too many expectations placed on them or too strict parental control. They set very high standards for themselves and try to live up to these expectations by making a huge effort to perform exceedingly well (Sankaran 1997:55). They try to achieve a state of perfection and thus things are never good enough for them. Their need for control over their surroundings and order in their surroundings is an obsession. They are very sensitive, sentimental and highly sympathetic. They cannot stand to see other people and even animals suffer. They have a very strong sense of duty and this is why they develop feelings of guilt. When developing a collapsed state their mind becomes foggy, they are aware of things but it does not register and they have to think deliberately. They are averse to conversation and are uninterested in their surroundings (Vermeuelen, 2002:407). These types of individuals develop burnout through their constant need to care for others as in nursing or counselling and even teaching. They develop burnout not necessarily through the environment that they work in but by their very nature of maintaining perfection and order at all costs. In these individuals, it is likely that emotional exhaustion and reduced personal accomplishment would be the most prominent manifestation of burnout.

A common theme running through the above remedies discussed is that of setting unattainable goals. Individuals needing these remedies push themselves beyond their own limits and it is clear how they would develop burnout. This correlates to 2 important individual causal factors for burnout discussed in Chapter 2. The first one is that individuals with a Type A personality are more likely to develop burnout. The above remedies can be described as having Type A personalities due to their constant need for perfection, high ideals and goals and immense drive to achieve. As seen in these remedies, although they have these qualities, they also have a deep seated belief that they are not good

enough and others will see this. It is a struggle to maintain the high standard they have set for themselves. As a result, no matter how hard-working they are, any setback is seen as a major event and is seen as being caused by an external factor. This can be related to Locus of control discussed in Chapter 2. These remedies have an external locus of control where they believe that all of their successes or failures are due to luck or fate and that they are not deserving or not good enough for the level of success they wish to attain or have attained. They most likely have an external locus of control, which makes them more susceptible to burnout.

CHAPTER 6

CONCLUSION AND RECOMMENDATIONS

6.1 CONCLUSION

The results of this study leads to the conclusion that statistically, the homoeopathic simillimum was not effective in the treatment of job burnout although there was an improvement in both groups.

It did however highlight the link between individual personalities, the type of person that would develop burnout and the remedies most appropriate for the treatment of the mental, emotional and physical symptoms of burnout. The study revealed that many remedies in the Homoeopathic Materia Medica share the same mental-emotional state that burnout sufferers find themselves in and has thus opened doors for further research into the homoeopathic treatment of burnout.

It also highlighted the importance of burnout sufferers seeking help for what they are experiencing. Many burnout sufferers do not admit that they are burnt out until they reach a point where they are unable to cope because they feel inadequate. Very few sufferers actually seek help. Getting past the state of denial and admitting that they are burnt out is the first step to overcoming this syndrome, as revealed by the improvement in burnout levels in both the groups.

6.2 RECOMMENDATIONS

The following recommendations are made for further research:

1. Increase the sample size of the study.
2. Conduct a study in which one group receives simillimum and a homoeopathic consultation and the other receives just the simillimum remedy based on a questionnaire.
3. Compare the efficacy of a homoeopathic simillimum to a homoeopathic complex in the treatment of job burnout.
4. Compare the use of various potencies including LM potencies.
5. Conduct a study into the benefits of lifestyle changes and stress reducing techniques together with homoeopathy as a long-term treatment for burnout.
6. Conduct a study comparing the efficacy of counseling to homoeopathy in the treatment of burnout.

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APPENDIX A

MASLACH BURNOUT INVENTORY-HUMAN SERVICES SURVEY

A. EMOTIONAL EXHAUSTION	SCORE
1. I feel emotionally drained from my work.	___
2. I feel used up at the end of the workday.	___
3. I feel fatigued when I get up in the morning and have to face another day on the job.	___
4. Working with people all day is a strain for me.	___
5. I feel burned out from my work.	___
6. I feel frustrated by my job.	___
7. I feel I'm working too hard on my job.	___
8. Working with people directly puts too much stress on me.	___
9. I feel like I'm at the end of my rope.	___
B. DEPERSONALISATION	
10. I feel I treat some recipients as if they were impersonal objects.	___
11. I've become more callous toward people since I took this job.	___
12. I worry that this job is hardening me emotionally.	___
13. I don't really care what happens to some recipients.	___
14. I feel recipients blame me for some of their problems.	___
C. PERSONAL ACCOMPLISHMENT	
15. I can easily understand how my recipients feel about things.	___
16. I deal very effectively with the problems of my recipients.	___
17. I feel I'm positively influencing other people's lives through my work.	___
18. I feel very energetic.	___
19. I can easily create a relaxed atmosphere with my recipients.	___
20. I feel exhilarated after working closely with my recipients.	___
21. I have accomplished many worthwhile things in this job.	___
22. In my work I deal with emotional problems very calmly.	___

SCORING KEY

0 = Never

1 = A few times a year or less

2 = Once a month or less

3 = A few times a month

4 = Once a week

5 = A few times a week

6 = Every day

APPENDIX B

CASE HISTORY QUESTIONNAIRE

(Bates, 1995)

DATE: _____ PATIENT NO.: _____
SURNAME: _____
FIRST NAMES: _____
AGE: _____ SEX: _____
OCCUPATION: _____
MARITAL STATUS: _____ CHILDREN _____
ADDRESS: _____

TELEPHONE: _____

MAIN COMPLAINT: WHAT SEEMS TO BE THE PROBLEM?

HISTORY OF MAIN COMPLAINT:

(ONSET, LOCATION, AETIOLOGY, DURATION, CHARACTER, MODALITIES, CONCOMITANTS, RADIATION, PATIENTS RESPONSE TO SYMPTOMS)

PAST MEDICAL HISTORY:

(RHEUMATIC FEVER, PNEUMONIA, TUBERCULOSIS, JAUNDICE, HIGH BLOOD PRESSURE)

PAST SURGICAL HISTORY:

DID YOU HAVE ANY OPERATION SINCE YOU WERE BORN?

CHILDHOOD DISEASES/ILLNESSES:

(MUMPS, MEASLES, CHICKEN POX, GERMAN MEASLES, TUBERCULOSIS)

TONSILS:

ALLERGIES:

VACCINATION HISTORY:

FAMILY HISTORY:

(TB, DIABETES, HEART DISEASE, HYPERTENSION, STROKE, ASTHMA, ARTHRITIS, ANAEMIA, HEADACHES, EPILEPSY, ECZEMA, KIDNEY DISEASE, HAYFEVER, CANCER, MENTAL ILLNESSES)

MOTHER:

FATHER:

SIBLINGS:

GRANDPARENTS (MOTHER AND FATHER):

SOCIAL HISTORY:

1. WHAT ARE YOUR HOBBIES, LEISURE ACTIVITIES AND EXERCISE?
2. DO YOU SMOKE?
HOW MANY?
3. DO YOU DRINK ALCOHOL?
HOW MUCH?
HOW OFTEN?

GENERALS:

ENERGY LEVELS

SLEEP

DREAMS

APPETITE

FOOD LIKES/DISLIKES

WEATHER LIKES/DISLIKES

THIRST

PERSPIRATION

SEXUAL LIBIDO

MENSES

STDS

SUPPLEMENTS AND OTHER MEDICATIONS

SYSTEMS REVIEW:

HEAD:

HEADACHES – Types?

- Location?
- Frequency?
- What makes it better/worse?
- Associating symptoms?

EYES:

(Vision, glasses, contact lenses, pain, redness, double vision, cataracts)

EARS:

(Hearing problems, vertigo, tinnitus, earaches, infections, discharge)

NOSE AND SINUSES:

(Pain, congestion, nosebleed, frequency of colds, hayfever, loss of smell)

MOUTH AND THROAT:

(Frequency of sore throat, bleeding gums, sore tongue, breath odour, loss of taste)

NECK:

(Swollen glands, pain or stiffness in the neck)

RESPIRATORY SYSTEM:

(Chest pain or discomfort, hypertension, rheumatic fever, murmurs)

GASTROINTESTINAL SYSTEM:

(Heartburn, anorexia, nausea, vomiting, abdominal pains, haemorrhoids, constipation and diarrhoea)

URINARY SYSTEM:

(Infection, burning and pain on urination)

GENITAL SYSTEM:

Female – menses

- discharge/leucorrhoea

Male – impotence

- sexual interest

MUSCULOSKELETAL SYSTEM:

(Joint pain, stiffness, arthritis, gout, backache)

NEUROLOGICAL SYSTEM:

(Numbness, paralysis, weakness, faintness)

ENDOCRINE SYSTEM:

(Thyroid trouble, diabetes)

ON EXAMINATION:

VITAL SIGNS:

PULSE

BLOOD PRESSURE

RESPIRATORY RATE

TEMPERATURE

WEIGHT AND HEIGHT

GENERAL OBSERVATIONS:

(State of health, signs of distress, skin colour and possible lesions, sexual development, posture, motor activity and gait, dress, grooming and hygiene, odours of the body and breath. Facial expression, note of awareness and level of consciousness, listen to patient's speech)

GENERAL OBSERVATION:

HEAD: inspection and palpation

- Note any – deformities
- lumps
- tenderness, other lesions

FACE: inspection and palpation

Note facial expression and contours, symmetry, involuntary movements, oedema, masses and facial pain.

EYES: inspection and palpation

- Note position and alignment.
- Note pupil size, shape, equality.
- Note any redness, swelling, vascular pattern, nodules.

NOSE AND PARANASAL SINUSES

Inspection and palpation

External surface-asymmetry, deformity, inflammation.

Internal surface-Nasal mucosa-colour, swelling, exudates, bleeding.

Nasal septum-bleeding, crusting, perforation or deviation

Inferior, medial turbinate and middle meatus-colour, swelling, exudates and
Polyps.

Palpate the sinuses-frontal sinus tenderness

Maxillary sinus tenderness

Postnasal drip-colour, odour, quantity, frequency.

MOUTH AND PHARYNX

Lips-colour, moisture, swelling.

Mouth-breath, taste, pain, lesions.

Teeth-caries, pain, abnormalities in shape, colour and position.

Pharynx-tonsils, swellings, lesions, colour, ulceration, uvula.

EARS

Ear drum and canal-discharge and foreign bodies, redness and swelling, cerum, colour
and contour.

-handle of malleus

-cone of light

-perforations

NECK

Stiffness and pain

Thyroid gland

Tracheal deviation

JVP

Lymph nodes

THORAX- **inspection, palpation and auscultation**

- chest wall movement and shape

- auscultation of heart and lungs

ABDOMEN - **inspection, palpation and auscultation**

- pain, tenderness, guarding spleen, liver, kidneys.

BACK – **inspection and auscultation**

- symmetry of body

- curvature and orientation of spine

- posture, any restricted movements.

UPPER AND LOWER LIMBS

-hair distribution, colour, temperature, any lesion, any pain and muscle conditions.

AXILLAE- **inspection and palpation**

4 areas – central - deep

distal

pectoral/anterior

subscapular/posterior

also - supraclavicular

infraclavicular

APPENDIX C

SUBJECT INFORMATION LETTER

TITLE OF RESEARCH PROJECT: **The effectiveness of homoeopathic simillimum in the treatment of Job Burnout in the Human Services Field.**

NAME OF SUPERVISOR: Dr. Ingrid Couchman, M.Tech. Hom. (TN)

NAME OF CO-SUPERVISOR: Dr. Ashley Ross, B.Mus (UCT); M.Tech. Hom(TN)

NAME OF RESEARCHER: Heshma Vaithilingam

Dear participant

Thank you for your time and interest in reading this letter.

I am a student at the Durban Institute of Technology. In order to qualify as a homoeopath, a mini-dissertation has to be completed in order to obtain a master's degree. This study seeks to evaluate the effectiveness of homoeopathic simillimum in the treatment of job burnout in the human services field.

The clinical trial will be conducted at the Homoeopathic Day Clinic during afternoon sessions under the supervision of a qualified and registered homoeopath.

QUALIFYING CRITERIA

The following criteria will have to be met by you, the participant, in order to participate in this study:

1. Individuals must be between the ages of 18-60.
2. Individuals must be currently employed and working full-time in the human services field.
3. Individuals must be literate.
4. Females who wish to participate must not be pregnant.
5. Individuals must not have a recent history (over the past 3 months) of the use of medications such as barbiturates, tranquilisers, anti-depressants and recreational drugs. Herbal preparations for insomnia are also prohibited.
6. Participants must exhibit signs and symptoms of burnout, that is, emotional exhaustion, depersonalization, reduced personal accomplishment, intense weariness, insomnia, fatigue, recurrent colds, headaches, gastro-intestinal disturbances, shortness of breath, general aches and pains, depression, hopelessness, irritability, weeping, anger outbursts and sadness.
7. Participants must not have a change of lifestyle during the research period including extensive leave, stress relief programmes etcetera.

METHOD OF STUDY

Once you have fulfilled these criteria and are willing to participate, you will be required to sign an informed consent form and you will be accepted into the study. The study will be run over 2 months. You will be required to come in for consultations at 4-week intervals, therefore you will be required to come in for 3 consultations. During these consultations you will be required to complete the Maslach Burnout Inventory-Human Services Survey (MBI-HSS). All information imparted to the researcher by your self is strictly confidential.

One of the elements of the study that make it scientifically acceptable is that it is a “double blind placebo controlled” study. This means that 50% of participants will receive active treatment and 50% will receive placebo, which looks and tastes the same as active treatment but is not medicated. “Double blind” implies that neither the researcher nor the participant will know who is receiving what until the end of the data collection phase, when the code is broken in order to analyse the data statistically.

In this study, participants will be randomly divided into 2 groups: 15 participants will be placed in the treatment group and 15 participants will be placed in the placebo group. There is a 50% chance that you may receive placebo, and if this is the case, you will be entitled to free homoeopathic treatment at the end of the trial.

Please note that your participation in this study is on a purely voluntary basis and the consultation and treatment costs will be covered by the Durban Institute of Technology.

RISKS AND BENEFITS

There is a possibility that there might be a slight increase in presenting symptoms at the commencement of treatment. Should this occur, it is usually very transient in nature and in homoeopathy, it is regarded as a good sign. You are free to withdraw from this study at any time and are not obligated to provide any reason for your withdrawal.

There is also a possibility that the treatment provided may be beneficial to you, by treating the symptoms of burnout. Please note that all patient information is strictly confidential.

If you have any questions about this study, please feel free to contact the supervisors or the researcher on the following numbers:

Dr. Couchman, M.Tech.Hom (TN) – (031) 204 2041

Heshma Vaithilingam – 082 587 8322

Thank you for your kind assistance and valuable participation in this study.

Heshma Vaithilingam

Department of Homoeopathy, Durban Institute of Technology.

APPENDIX D

INFORMED CONSENT FORM

TITLE OF RESEARCH PROJECT: **The effectiveness of homoeopathic simillimum in the treatment of Job Burnout in the Human Services Field.**

NAME OF SUPERVISOR: Dr. Ingrid Couchman, M.Tech. Hom. (TN)

NAME OF CO-SUPERVISOR: Dr. Ashley Ross, B.Mus (UCT); M.Tech. Hom(TN)

NAME OF RESEARCHER: Heshma Vaithilingam

PLEASE CIRCLE THE APPROPRIATE ANSWER:

- | | |
|--|--------|
| 1. Have you read the subject information letter? | YES/NO |
| 2. Have you had an opportunity to ask questions about the study? | YES/NO |
| 3. Have you received satisfactory answers to your questions? | YES/NO |
| 4. Have you had the opportunity to discuss this study? | YES/NO |
| 5. Have you received enough information about this study? | YES/NO |
| 6. Who have you spoken to? _____ | |
| 7. Do you understand the implications of your involvement in this study? | YES/NO |
| 8. Do you understand that you are free to withdraw from this study: | YES/NO |
| a) at any time | |
| b) without having to give a reason for withdrawing, and | |
| c) without affecting your future health care | |
| 9. Do you agree to voluntarily participate in this study? | YES/NO |

If you have answered no to any of the above, please obtain the information before signing.

PATIENT NAME: _____

SIGNATURE: _____

APPENDIX E

RANDOMISATION SHEET(Compiled by Dr.I Couchman on 29/03/04)

Patient number	Simillimum	Placebo
1		X
2		X
3	X	
4		X
5	X	
6	X	
7	X	
8	X	
9	X	
10	X	
11	X	
12	X	
13	X	
14		X
15	X	
16	X	
17		X
18		X
19		X
20		X
21		X
22		X
23		X
24	X	
25		X
26		X
27		X
28		X
29	X	
30		X

APPENDIX F

Method 40a: Potentised mixtures (British Homoeopathic Association, 1991)

Mixtures potentised by Method 40a may contain basic drug materials, solutions or triturations in combination with liquid preparations, liquid dilutions, and mother tinctures which according to the Method of preparation are to be processed in a 1:10 ratio. Method 40a is limited to potentisation of combined liquid preparations produced by Methods using a mixture of ethanol and water as the vehicle.

Potentisation

Combine and success 1 part of the given mixture and 9 parts of ethanol in a suitable concentration for each potentising stage.

Labelling

State the number of potentising stages applied to the mixture;the same applies to presentations produced from potentised mixtures