

# THE HOMEOPATHIC TREATMENT OF PRIMARY DYSMENORRHOEA

by

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I Natalie Tsolakis do hereby declare that this dissertation represents my own work both in conception and execution.

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## ABSTRACT

The purpose of this study was to determine the effectiveness of homeopathic treatment on primary dysmenorrhoea in terms of patient's perception to the treatment.

A sample of thirty patients was randomly chosen from the greater Durban area in response to advertisements that had been placed in various advertising media. They were then screened for the delimitations and sent to a registered gynaecologist for an internal examination and confirmatory diagnosis of primary dysmenorrhoea. Each patient then underwent a medical and homeopathic consultation and examination on the first day of their menstrual cycle, and a patient perception questionnaire was completed with the researcher so as to establish a baseline.

The study followed a double-blind protocol with a neutral member dividing the sample into a control and treatment group. The treatment group received simillimum treatment in the form of a chronic remedy taken twice a week and one or two symptomatic remedies taken on a daily basis. The control group received placebo.

For the duration of the eight month trial period, each patient was reassessed on their first day of their menstrual cycle to allow for any needed changes to their treatment regimen, and to allow for the patient's perception to the treatment to be recorded in the researcher's presence.

The study was divided into two subproblems, the first one being to evaluate the homeopathic treatment of primary dysmenorrhoea in terms of the patient's perception to the treatment and the second was to analyze and interpret the collected data.

In subproblem one the Paired T-test was used to compare the baseline questionnaire scores against the scores on completion of the trial for both control and treatment groups. The p values calculated for the control and treatment group were 0.987 and 0.063 respectively indicating no significant statistical difference between the initial and final questionnaire scores for both groups. However in terms of the patient's perception to their clinical status the control group showed a 53% improvement in clinical manifestations as opposed to the 73% improvement of the treatment group.

In subproblem two the change in patient's perception to the treatment of the control group was compared to that of the treatment group using the UN-paired T-test. The p value of 0.466 with a significance level of 95%, showed that there was no significant difference between the two groups.

Further comparison studies were made between each subsection of the questionnaire within the control and treatment group as well as subsection comparisons between the two groups.

With each subsection representing different aspects of the patient's perception to the treatment it was noted that the treatment group substantially improved in all subsections by more points when compared to the control group, which worsened in three of the six subsections.



Even though statistical analysis revealed no statistical difference in the results within each group, it is important to note that clinically 73% of patients receiving simillimum showed improvement. This represented a 23% greater subjective improvement within the simillimum group as opposed to the control group. These findings therefore suggest that simillimum treatment has a role to play in the management of primary dysmenorrhoea.

## UITTREKSEL

Die doel van die studie was om die uitwerking vas te stel van homopatiese behandeling van primêre dysmenorrhoea in terme van die pasiënte se persepsie van die behandeling.

In reaksie op advertensies in die media is 'n steekproef gedoen op 30 pasiënte uit die groter Durban-omgewing. Die pasiënte wat aan die vereistes voldoen het is na 'n geregistreerde ginekoloog gestuur vir 'n interne ondersoek en die bevestiging van die diagnose van primêre dysmenorrhoea. Elke pasiënt het op die eerste dag van hulle menstruele siklus 'n mediese en homopatiese konsultasie en ondersoek ondergaan, waartydens hulle ook 'n vraelys ingevul het wat as grondslag vir die studie gedien het.

Die studie is volgens die dubbel-blinde beginsel uitgevoer - 'n onpartydige persoon het die pasiënte in kontrole en eksperimentele groepe ingedeel. Die eksperimentele groep het simillimum behandeling ontvang in die vorm van 'n kroniese medisyne wat twee keer per week geneem is en een of twee symptomatiese medisyne op 'n daaglikse basis. Die kontrole groep is plasebo toegedien.

Gedurende die agt maande van die studie is elke pasiënt op die eerste dag van hulle siklus ge-evalueer sodat enige nodige veranderinge in die behandeling gedoen kan word en sodat die pasiënte se waarneming van die behandeling aangeteken kon word in die navorser se teenwoordigheid.

Die studie is in twee sub-probleme ingedeel. Die eerste was die evaluering van die homopatiese behandeling van primêre dysmennorrhoea in terme van die pasiënte se persepsie van die behandeling en die tweede was die ontleding en interpretasie van die ingesamelde data.

In subprobleem een is die gepaarde T-toets gebruik om die grondslagvraelys met die laaste vraelys in beide die eksperimentele en kontrole groepe te vergelyk. Die p-waardes vir die kontrole en eksperimentele groepe was 0,987 en 0,063 respektiewelik wat aandui dat daar geen beduidende statistiese verskil was tussen die eerste en laaste vraelyste in beide groepe nie. In terme van die pasiënte se persepsie van hulle toestand het die kontrole groep 'n verbetering van 53% getoon en die eksperimentele groep 73%.

In subprobleem twee is die verandering in die pasiënte se siening van die behandeling in die kontrole groep met die van die eksperimentele groep vergelyk en die ongepaarde T-toets is gebruik. Die waarde van  $p = 0,466$  met 95% belangevlak toon dat daar geen statistiese verskil tussen die twee groepe was nie. Verdere vergelykende studies is gedoen tussen elke onderafdeling in elke groep se vraelyste en tussen die groepe.

Elke onderafdeling het verskillende aspekte van die pasiënte se waarneming van die behandeling weergegee en daar is waargeneem dat die eksperimentele groep 'n beduidende verbetering in alle onderafdelings getoon het teenoor die kontrole

groep. Die kontrole groep se toestand het in drie onderafdelings verswak.

Hoewel die statistiese ontleding geen beduidende verskil in die resultate tussen elke groep getoon het nie, is dit belangrik om daarop te let dat die eksperimentele groep 'n kliniese verbetering van 73% ervaar het, wat 23% meer is as die verbetering in die kontrole groep. Die bevingdinge toon dus dat die simillimum behandeling 'n rol het om te speel in die behandeling van primêre dysmennorhoea.

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# INTRODUCTION

## IMPORTANCE OF THE STUDY

### Immediate background of the problem

Primary dysmenorrhoea is one of the most common complaints in the female population with half of all women experiencing this condition before their first pregnancy (Akerlund, 1990).

The signs and symptoms of primary dysmenorrhoea can vary from slight abdominal discomfort to having severe spasmodic cramps, lower backache, headache, fatigue with nausea, vomiting, sweating as well as fainting in extreme cases (Berkow and Fletcher, 1992). All these prevent the woman from going about her normal daily schedule for one to three days, every month of her reproductive life, thus missing out on valuable school time as well as work and family duties. In America, it is estimated that some 600 million working hours are lost annually to absenteeism secondary to the pain of dysmenorrhoea (Dawood, 1988).

Primary dysmenorrhoea causes considerable personal and family disruption in the working women. It not only incapacitates the woman physically for a few days but also affects her mental and emotional state throughout her reproductive years, as depression and anxiety set in (Dawood, 1988). Research has stated that approximately 50% of young dysmenorrhoeic girls will present signs of anxiety, emotional instability and maladjustments either to their environment or to their school (Parsons and Sommers, 1978).



### Need for solution to the problem

Attention must be given to primary dysmenorrhoea and its treatment because despite its common prevalence, the treatment orthodox medicine has to offer is sometimes ineffective but most importantly the majority of them have slight or severe side effects. The common analgesics and various forms of contraception which are used together with the more drastic yet infrequent measures such as pre-sacral neurectomies, uterosacral ligament division or even hysterectomies, do not address the cause of the problem, resulting in the recurrence of the condition or unnecessary irreversible changes (Pernoll and Benson, 1987, Akerlund, 1990 and Smith, 1988).

Treating and relieving women who have primary dysmenorrhoea can reduce absenteeism from the classroom or workplace and allow them to concentrate and perform better. In this respect significant economic loss can be reduced with a simple non-adverse medication (Dawood, 1988).

### Description of the solution

Homeopathic treatment works in a holistic manner, and is very individualized addressing all three levels of human existence - mental, emotional and physical (Jouanny, 1991 and Boiron, 1992).

The medication given to the patient after taking a concise medical and homeopathic case history will attempt to alleviate the patients symptoms. Once the physical state is addressed and some results are

evident, then the other two levels, emotional and mental will gradually follow (Jouanny, 1991).

#### Benefits that will come from solving the problem

Solving the problem of primary dysmenorrhoea will bring about relief to these women who are incapacitated for a couple of days every month, consequently improving the quality of their domestic and social lives (Dawood, 1988).

This then has a ripple effect on their productivity especially in the working field thus resulting in significant economic increase (Dawood, 1988 and Parsons and Sommers, 1978).

Bringing about relief homeopathically through this research will allow the female population the choice of alternative treatment and a means of treating primary dysmenorrhoea with a safe form of medication and with no side effects.

#### Feasibility of the solution.

This investigation is feasible because the patients are available, the methodology employed is both simple and logical and the facilities are available at Technikon Natal.

Above all homeopathic treatment is not only a natural branch of medicine but it is safe and non-toxic, very individualized, which is what primary dysmenorrhoea requires (Parsons and Somers, 1978) and above all more economically viable than conventional medicine (Boiron, 1992).

# CHAPTER ONE:

## THE PROBLEM AND ITS SETTING

### 1.1 THE STATEMENT OF THE PROBLEM

This study proposes to determine the impact of homeopathic treatment in primary dysmenorrhoea, with reference to the patient's perception to the treatment, in order to determine how effective homeopathy is in treating primary dysmenorrhoea.

### 1.2 THE STATEMENT OF THE SUBPROBLEMS

#### 1.2.1 The first subproblem

The first subproblem is to evaluate the homeopathic treatment of primary dysmenorrhoea, in terms of the patient's perception to the treatment, in order to determine the relationship between the two.

#### 1.2.2 The second subproblem

The second subproblem is to analyze and interpret the collected data, so as to present the positive or negative effects of the homeopathic treatment on primary dysmenorrhoea, in order to determine how effective this treatment is.

## 1.3 THE HYPOTHESIS

### 1.3.1 Hypothesis one

It is hypothesized that there is a relationship between the homeopathic treatment administered and the patient's perception to the treatment which can be measured.

### 1.3.2 Hypothesis two

It is hypothesized that it is possible to integrate the collected data, on the elements of treatment patients consider significant, allowing the integrated data to demonstrate how effective homeopathy is in treating primary dysmenorrhoea.

## 1.4 THE DELIMITATIONS

1.4.1. This study will not accept any subject who is undergoing some other form of treatment for primary dysmenorrhoea.

1.4.2. This study delimits itself from any other form of treatment except homeopathy.

1.4.3. This study will not accept any patients older than thirty years.

1.4.4. This study will delimit itself from the explanation of how homeopathy works on a biochemical level, in the treatment of primary dysmenorrhoea.

1.4.5. This study will not accept any patients who use intrauterine devices as a form of contraception.

## 1.5 THE ASSUMPTIONS

### 1.5.1 The first assumption

In this study only one form of treatment is allowed, and therefore once this study has begun it is assumed the patients will not take any other form of medication for their dysmenorrhoea.

### 1.5.2 The second assumption

Homeopathy is based on a principle called similimum, therefore it is assumed that this principle is valid.

### 1.5.3 The third assumption

Once the study commences the patient will be required in a disciplined manner to take a prescribed amount of homeopathic medicine per day, therefore it is assumed that the patients will participate unconditionally and take their medicine as directed, not exposing the medicine to any situation that might antidote it.



## 1.6. THE DEFINITION OF TERMS

### Similimum:

Similimum or the law of similars stipulates that there is a resemblance between the toxic and therapeutic actions of a same substance. The symptoms displayed by a sick individual are cured by the substance capable of giving the same symptoms in a healthy subject (Horvilleur and Boyer, 1990).

### Repertorising:

Repertorising is a homeopathic concept that deals with the process of picking symptoms and signs from the patient, followed by reading up the relevant remedies for each symptom and sign, and finding the common remedies among all the symptoms and signs (Schultz, 1994).

### Placebo:

Inactive substances used in controlled studies for comparison with presumed active drugs or prescribed with intent to relieve symptoms or meet a patient's demands (Berkow and Fletcher, 1992).

# CHAPTER TWO:

## REVIEW OF RELATED LITERATURE

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9. Measurement
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### 1. OVERVIEW

In the literature review all aspects of primary dysmenorrhoea relevant to the research project are investigated.

Primary dysmenorrhoea and its most common, yet varied clinical pictures as well as how to diagnose and other differential diagnosis are taken into account. The approach and treatment used by conventional medicine and its proficiency on primary dysmenorrhoea will be discussed together with homeopathic treatment and their differences .

The role of placebo in this research, together with the tool of measurement used on the efficacy of homeopathy is discussed.

This research project is carried out with the aim of learning more about primary dysmenorrhoea, homeopathy and their relationship.

### *DEFINITION AND CLASSIFICATIONS OF PRIMARY DYSMENORRHOEA*

"Severe or incapacitating uterine cramping in women with ovulatory menstruations but with no demonstrable disorders of the pelvis is termed Primary Dysmenorrhoea" (Wilson et al. 1991).

Dysmenorrhoea is divided into two or sometimes three classifications, depending on the text.

The first two major classifications are, primary and secondary dysmenorrhoea which are mentioned in most books and articles, but the third type, that being membranous dysmenorrhoea, is also sometimes mentioned.

Definitions for the other classifications are necessary so as to avoid misdiagnosis and confusion.

Secondary dysmenorrhoea is pain with menstruation caused by demonstrable pathology (Wilson et al. 1991).

Such pathology is found in conditions such as endometriosis, adenomyosis, chronic pelvic inflammatory disease, adhesions and uterine polyps (Holmlund, 1990).

Membranous dysmenorrhoea, according to Pernoll and Benson (1987), is intense pain caused by the passage of intact endometrial

lining through an undilated cervix. This type is rarely mentioned as a classification on its own but rather included as a cause for primary dysmenorrhoea.

Another type of dysmenorrhoea or rather a cause of it, which is not classified, but must be taken into account, is intrauterine device related dysmenorrhoea (Pernoll and Benson, 1987 and Dawood, 1988). By 1983 it was reported that 30% of patients fitted with an IUD, reported cramps and bleeding (Benson, 1983).

### *DEFINITION AND HISTORICAL BACKGROUND ON HOMEOPATHY*

Jouanny (1991) : "Homeopathy is a therapeutic method which clinically applies the law of similars and which uses medicinal substances in weak or infinitesimal doses".

Another definition stated by Patel, (1990) is :

"Homeopathy: a discipline of healing arts, a science concerned with the cause, diagnosis, treatment and prevention of the disease by administering in small doses medicines made from mineral, animal and plant sources which would produce in healthy persons, symptoms similar to those they are designed to remove".

Although homeopathy was and is still thought by some to be a bizarre idea of healing or even going as far as to say that it has a mystical feel about it, it is merely a therapeutic method resulting from a hypothesis based on clinical fact and perfected after years of clinical and toxicological experiments (Jouanny, 1991).

According to Jouanny (1991), the basis or origins of homeopathy are rooted as far back as twenty five centuries ago in a well established and well respected school of thought and medicine. The school being that of Hippocrates, the founder of allopathic medicine. As far back as that, the underlying principle of homeopathy "Similia Similibus Curanter" more easily understood as: "The same things which cause the disease, cure it", was observed and acknowledged. Hippocrates himself stated, "The strangury which is not, cures the strangury which is", strangury being the term used for cystitis. This was cured by small doses of Cantharis which when given in its original form in larger doses, causes cystitis.

In centuries that followed, many other doctors made similar observations but could not draw any practical conclusions.

The big break through came about by a German physician, chemist and toxicologist, round about 1790, Christian Samuel Hahnemann who was well acquainted with the Hippocratic school of thought and its observations. He became aware of the ability of remedies that caused a particular condition, to also cure it. He then worked on the hypothesis by carrying out countless experiments on, firstly himself, and later, on healthy people around him, constantly noticing that substances causing certain signs and symptoms in healthy individuals mimicked those seen in unhealthy or diseased patients.

This form of experimentation is today known as provings. These results though only came about by the use of very weak and even infinitesimal doses of the substance used.

After many years (about ten years) of clinical trials and experimentations, Hahnemann's hypothesis being proven over and



over again is no longer a hypothesis but a law of nature, now known as "The Law of Similars".

i.e. for every reaction there is an equal and opposite reaction (Scott and McCourt, 1983).

## 2. AETIOLOGY

Although homeopathy is not a symptomatic therapy as many poorly informed doctors have criticized it for being, it does not neglect the diagnosis of disease or aetiology (Jouanny, 1991).

Dysmenorrhoea's frequent occurrence and potentially debilitating severity also requires that those of us who treat it, have a working knowledge of its causes (Roger, 1988).

Unfortunately the problem is not that easy as past and present research has come up with many different causes and aggravating factors of primary dysmenorrhoea and as Parsons and Sommers (1978) stated: "Although we have a greater understanding of the mechanics involved, we do not as yet know the basic cause", thus making treatment that much more difficult.

More recent literature states that despite their knowledge of certain hormones and varied chemicals playing a role, "... the primary stimulus for their production remains unknown" (Rees, 1988).

A brief summary on the first through to the current aetiological discoveries of primary dysmenorrhoea will be given elucidating an understanding of the complexities of this condition.

According to Smith, (1988) the first achievement was measuring uterine activity which occurred in 1872 followed by reports done on uterine activity in non-pregnant women in 1925. By 1932 researchers hypothesized that increased uterine activity was the cause of primary dysmenorrhoea and objective findings were later added on by the 1930's.

By the late 1940's it was accepted that women suffering from primary dysmenorrhoea had fundamentally different activity in the uterus and this was further followed up by studies in France, showing that these women had a greater degree of electrical and mechanical activity which correlated with the pain of menstruation. Despite further significant studies done in 1947, not much more could be done on finding a cause, until uterine biochemistry was investigated.

The first discovery in biochemical aetiology was the existence of "menstrual toxin" which explained people's mysterious ideas as mentioned by Dawood (1988) that : "In some cultures, menstruating women are considered unclean or a safety hazard" and "... are not allowed to enter shrines and houses of worship and even causing flowers to wilt or baking bread to fall", as mentioned by Smith (1988).

In 1957 research discovered that the "menstrual toxin" containing acetone and ether extracts also contained a powerful muscle stimulant which was later tracked down to its source, that being the sloughing endometrium. By 1963 these muscle stimulants were identified as prostaglandins (Smith, 1988).

Unfortunately, although prostaglandins do play a significant role in the cause of primary dysmenorrhoea, as we will see later on, it is

not the sole cause which is restated by Parsons and Sommers (1978): "With such a wide spectrum of symptoms it is not surprising that no one etiological theory is adequate to explain all the varied manifestations of primary dysmenorrhoea, much less to suggest a cure for them".

Further causes and brief explanations are mentioned by Berkow and Fletcher (1992) and Gold and Josimovich(1980):

- Cervical obstruction is one of the earliest and still one of the most persistent theories, where in fact the pain is either produced by the forcible stretching of the sympathetic nerve fibre or in fact, the inability of the uterus to extrude a polyp or a large membranous clot.
- A hypoplastic or maldeveloped uterus was also considered but after various speculations, its validity was questioned.
- Lesions within the sacral nerves themselves, is another consideration where operations have shown them to be more firm, fibrous and adherent to the iliac vessels and the sacrum, thus the pain could be due to the modification of the nerve impulses along the altered or damaged nerves.
- Another simple explanation for primary dysmenorrhoea is the normal physiological process of menstruation, where the spiral arterioles supplying the functional layer of the endometrium actually kink and contract once the endometrium regresses in thickness in response to the reduction in Growth Hormone which degenerates the corpus luteum. With the arterioles contracting, circulation is slowed down and finally stopped. At this point the endometrium necroses thus the muscle contracts and ischaemia follows, causing pain.

Although this seems to be the most appropriate and sound reason for primary dysmenorrhoea, it doesn't explain why all women don't suffer in this natural process. This is where more modern research highlights the PGF<sub>2a</sub>/PGE<sub>a</sub> ratio as being higher in suffering women (Parsons and Sommers, 1978).

At this stage according to Berkow and Fletcher (1992) and Wilson et al, (1991), the pain is thought to result from uterine contractions and ischemia, probably mediated by the effect of prostaglandins produced in the secretory endometrium. This cause is shared by Benson (1983) who goes further to state that significantly elevated prostaglandin (PGF<sub>2a</sub>) has been detected in the endometrium. This discovery was also mentioned in Smith (1988), stating that it was in 1965 where experimentation reported increased levels of PGF<sub>2a</sub> in women suffering from primary dysmenorrhoea.

According to both Smith (1988), Gold and Josimovich (1980) the causative role of PGF<sub>2a</sub> in primary dysmenorrhoea was supported by experiments done where PGF<sub>2a</sub> was infused into healthy human volunteers with the results of not only inducing menstrual bleeding but also the entire spectrum of dysmenorrhoea symptoms. They go on to describe the physiological properties of the prostaglandins, among which are, vasoconstriction and muscle stimulating properties, thus exaggerating uterine contractions causing relative tissue anoxia and pain.

The levels of prostaglandins were measured in the ailing women finding that at the time of menstruation, prostaglandin metabolites were of higher concentration compared to normal women and that

significant absorption of PGF<sub>2a</sub> from the uterus into the systemic circulation may account for the gastrointestinal and other systemic symptoms felt by the patients (Smith, 1988).

Further studies later suggested that it was the interaction of vasopressin, prostaglandins and leukotrienes causing primary dysmenorrhoea, as elevated levels of leukotrienes C<sub>4</sub>, D<sub>4</sub>, E<sub>4</sub> have been found in ailing women, together with higher levels of vasopressin which also stimulates uterine activity, decreasing uterine blood flow and causing pain (Smith, 1988).

Despite the overwhelming evidence of PGF<sub>2a</sub>/PGE ratios and increased leukotrienes and vasopressin levels being the cause of primary dysmenorrhoea (Akerlund, 1990), psychogenic causes are still not being ruled out. Women with dysmenorrhoea have been described as maladjusted, as being more depressed, anxious and withdrawn with increased suicide rates and neuroticism, and as rejecting their femininity (Dawood, 1988 and Holmlund, 1990).

As Parsons and Sommers (1978) state, "... since the cause of pain is incompletely understood and the physical findings are negative, it is not surprising that the complaints associated with the period are often attributed to psychiatric causes ..."

Another possibility is that the apprehensions expressed at the time of menstrual period may be the result, not the cause of dysmenorrhoea (Parsons and Sommers, 1978).

Although the psychological aspect cannot be completely ruled out due to the complex nature of primary dysmenorrhoea, the organic/physical evidence outweighs the psychogenic. The evidence

being that, presacral neurectomies, which involves the excision of the superior hypogastric plexus (the nerves supplying the endometrium and general pelvic area are severed), brings complete and permanent relief to the primary dysmenorrhoea sufferers (Gold and Josimovich, 1980), thus pointing to the fact that primary dysmenorrhoea is an organic, rather than a psychogenic problem.

Other causes or influencing factors that play a role in monthly period pains are early menarche, duration of flow and amount of menstrual bleeding which were all found to have significant correlation with severity of pain. Hereditary factors also exist, errors of posture, allergic states as well as stress and fatigue (Andersch and Milsom, 1982). The consumption of caffeine-containing beverages, tobacco usage and alcohol consumption have also been found to have a positive correlation to menstrual pain (Teperi and Rimpela, 1989).

Trauma, fatigue and disease are some of the factors that lower the patient's threshold of pain and nutritional state is also important for proper function of the hormones which is directly dependent on it (Parsons and Sommers, 1978).

Primary dysmenorrhoea is a multidimensional phenomenon affected by a large number of factors (Andersch and Milsom, 1982), and although excessive levels of prostaglandins, leukotrienes and vasopressin have been found in primary dysmenorrhoea, the primary stimulus for their production remains unknown (Rees, 1988).

### 3. PHYSIOLOGY-PATHOPHYSIOLOGY

The researcher investigates the physiology and possible pathophysiology of primary dysmenorrhoea to obtain a greater understanding of its mechanism and to attack the problem at its origin. Thereby not treating this condition merely symptomatically, but offering a more holistic approach (Jouanny, 1991).

According to the most recent research the primary aetiology of primary dysmenorrhoea is uterine ischemia enhanced by hormonal levels (Akerlund, 1990). In order to understand the role and effect of the hormones and the ischemic process a brief summary on the female menstrual cycle is required. This enables the researcher to investigate if a pathophysiology is in fact present and/or whether the homeopathic treatment in its holistic approach, should focus more on the external influencing factors.

The female hormonal system consists of three different hierarchies of hormones:

- a hypothalamic releasing hormone: luteinizing hormone-releasing hormone (LHRH)
- the anterior pituitary hormones: follicle-stimulating hormone (FSH) and luteinising hormone (LH)
- the ovarian hormones: estrogen and progesterone

Low levels of estrogen and progesterone result in menstruation. During menstruation the thickened endometrium of the uterus is gradually sloughed off. During this phase of the menstrual cycle FSH is the principal hormone released by the pituitary gland. This stimulates a group of follicles to develop in the ovary (Guyton, 1987).

During the second phase of the menstrual cycle/preovulatory, FSH and LH stimulate the follicles developing in the ovary to produce estrogens. The estrogens stimulate growth of the endometrium once again. Its blood vessels and glands begin to develop again. As the estrogen level rises, the anterior pituitary increases its secretion of FSH. The rise in LH stimulates the granulosa cells of the follicle to secrete progesterone. It also stimulates the theca cells to secrete testosterone and another androgen. These androgens diffuse into the granulosa cells of the follicle and serve as precursors for estrogen production.

At mid cycle the large amounts of estrogens secreted from the follicles inhibit gonadotropic hormone production by the hypothalamus. As a result the anterior pituitary slows its release of FSH. The rise in estrogen stimulates the anterior pituitary to secrete a surge of LH which is needed for the final maturation of the follicle and for ovulation to occur (Guyton, 1987).

After ovulation the third/postovulatory phase begins. LH stimulates development of the corpus luteum, which releases progesterone as well as estrogens. These hormones stimulate continued thickening of the endometrium. Progesterone especially affects the small glands in the endometrium, stimulating them to secrete a fluid rich in nutrients. Should fertilization occur, this fluid nourishes the early embryo. If pregnancy does not occur, the high concentrations of estrogens and progesterone from the corpus luteum inhibits gonadotropic hormone and LH secretion. As a result, the corpus luteum begins to degenerate, and progesterone and estrogen concentration in the blood fall markedly. Spiral arteries in the uterine wall constrict, and the part of the endometrium they supply becomes ischemic. Menstruation begins



once again as cells begin to die and damaged arteries rupture and bleed. Prostaglandins together with vasopressin and leukotrienes are liberated in the endometrium to help stimulate sloughing off of the endometrial tissue by causing intense arterial spasm and smooth muscles contraction (Solomon, Schmidt and Adragna, 1990). They are also known to cause vasoconstriction in the endometrium that precedes dilatation and menstrual bleeding (Benson, 1983).

#### 4. CLINICAL PICTURE AND DIAGNOSIS OF PRIMARY DYSMENORRHOEA

This research project is attempting to investigate how proficient homeopathy is in treating primary dysmenorrhoea, and it is imperative that the researcher be able to recognize primary dysmenorrhoea as well as be able to differentiate it from related conditions.

The diagnosis of primary dysmenorrhoea is relatively easy to make. Firstly one is to obtain a clear and concise case history, involving, description of the pain and onset, as well as associating symptoms.

A history of progressive menstrual pain, starting a few years after menarche associated with ovulation without evidence of any organic disease, usually present in women younger than thirty, are the major characteristics of primary dysmenorrhoea (Pernoll and Benson, 1987).

Secondly a complete physical examination and a gynaecological examination are performed which confirm the latter as well as picks up additional signs and symptoms which the case history may

lacking. Findings on gynaecological examination are usually essentially normal (Benson, 1983).

Despite the sometimes incapacitating effects of primary dysmenorrhoea it is a self-limiting process, meaning that it is not a life time problem. This common disability usually appears during adolescence and tends to decrease with age and following pregnancy (Berkow and Fletcher, 1992 and Akerlund, 1990).

The patients complain of pain prior to, or on the first day of menses with it peaking after 24 hours and usually subsiding after two days (Akerlund, 1990 and Berkow and Fletcher, 1992).

The pain is described as a steady dull aching feeling in the hypogastrium and equally on each side of the mid-line accompanied by a bearing down sensation. When the pain is more severe it is described as a colicky, cramping almost gripping feeling which may be accompanied by nausea, vomiting and sweating as well as headaches, fainting, constipation or diarrhoea and urinary frequency (Tatford 1986). Other commonly associated features are abdominal distention, painful breasts, premenstrual tension, depression and irritability which may persist during part of or throughout the menses.

The pain can radiate to the suprapubic area, lower back and down the legs (Berkow and Fletcher, 1992).

The signs and symptoms of primary dysmenorrhoea can be mixed up with premenstrual tension which characteristically occurs ten days to two weeks before menses but usually ceases with the onset

of menses and is replaced by dysmenorrhoea (Pernoll and Benson, 1987 and Berkow and Fletcher, 1992),

Other common misdiagnoses, is secondary or acquired dysmenorrhoea which is readily identifiable through the case history and physical examination, with the occasional support of diagnostic procedures (Pernoll and Benson, 1987).

Secondary dysmenorrhoea is associated and caused by specific diseases and disorders and most often found in women over the age of thirty (Akerlund, 1990). Depending on the underlying condition causing the pain, the signs and symptoms will vary but some common differentiating symptoms which points one away from primary dysmenorrhoea and towards an underlying pathology is when the pain persists throughout the month, or when the dysmenorrhoea begins after several years of pain-free menses (Berkow and Fletcher, 1992).

Further differential diagnosis in young women (under the age of thirty) according to Tatford (1986) are :

- Irritable bowel syndrome/spastic colon, which is accompanied by altered bowel movements and pain occurring at other times including during menstruation.
- Intrauterine device is quite often misdiagnosed but this subject would be covered in the case history.
- Chronic pelvic infection which would be picked up by examination and other presenting signs and symptoms.

Further conditions include ovarian cysts and tumors, congenital abnormalities of the uterus, haematocolpos and acute forms of dysmenorrhoea where a young women presents with pain for only

one or two cycles - these include, abortion, ectopic pregnancy, acute pelvic inflammatory disease and foreign bodies in the genital tract.

## 5. MEDICAL TREATMENT

It is important to review the conventional medical management of primary dysmenorrhoea, because the researcher will then be able to compare and differentiate the role and efficacy each discipline can play in the management of this condition.

In orthodox medicine, according to Creatsas et al. (1990), most treatments proposed for primary dysmenorrhoea cases are related to the pathophysiology of the disease, such as inhibition of ovulation, reduction of prostaglandin production and regulation of the myometrial tone. The choice of treatment is graded according to the severity of the symptoms, the age of the patient, the need for contraception and the pattern of menstrual cycle. As Rees (1988) mentions, a wide range of treatments have been proposed for primary dysmenorrhoea as one form of treatment may have to be supplanted by another because of side effects or because of failing effectiveness (Tatford, 1986)

The medical establishment's first line of attack according to Tatford (1986) is, simple measures of reassurance and explanations to a young frightened girl or elderly patient, clearing up any misunderstandings about menstruation. Then any causes of emotional stress are investigated and any unfavourable factors of environmental type resolved.

Then general health concerning smoking, drinking and diet are looked over and altered if need be as well as promoting physical exercise.

Simple measures of pain relief are suggested during the time of discomfort, such as lying down and applying external heat in the form of a hot bath or hot water bottle.

Unfortunately by the time the patient visits a doctor for help she has already tried all the simple means of pain relief, and now seeks medical intervention, such as drugs.

According to Tatford (1986), Akerlund (1990) and Berkow and Fletcher (1992), simple analgesics such as Aspirin and Paracetamol are the first drugs of choice, with regular dosages four hourly during the first day of pain. Although they also have the ability to inhibit prostaglandin synthetase, their disadvantage is the high rate of gastric irritation.

Anti-spasmodic drugs, narcotic analgesics, compound analgesic preparations and anti-prostaglandin drugs is their next line of treatment.

Should common analgesics fail to suffice, non-steroidal anti-inflammatory drugs (NSAID) are prescribed which have an effect in about 75% of the cases (Akerlund, 1990 and Dawood, 1988). The problem with these drugs as stated by Akerlund (1990), is the time lag between medication and effect on symptoms as the pain is very rapidly progressive and the drug can only come into effect after two hours. These drugs may also not be given to patients with gastroduodenal ulcers or sensitivities to NSAID (Dawood, 1988).

If pain still continues, despite the above mentioned treatment, then low dose estrogen-progesterone birth control pills are dispensed causing suppression of ovulation (Berkow and Fletcher, 1992 and Akerlund, 1990). Unfortunately this form of medication is rejected by many patients due to various ethical or religious reasons as well as their side effects such as nausea, headaches, depression, mood swings, breast tenderness, acne and breakthrough bleeding (Saleh et al. 1993). The patients also face a risk of long term secondary post-pill amenorrhoea which may follow the cessation of the therapy (Tatford, 1986).

Gynaecologists are also wary of prescribing the oral contraceptive pill to young women due to its possible correlation with breast cancer. Thus this type of treatment is considered for women who also need a reliable contraceptive and not merely a form of treatment for primary dysmenorrhoea (Akerlund, 1990).

Despite all this though, the oral contraceptive pill does bring about relief in 80% to 90% of cases (Rees, 1988). If they are not as effective, then these are combined with NSAIDs (Akerlund, 1990).

Calcium channel blocking agents can sometimes be helpful in failures with other therapeutic alternatives, however their side effects are pronounced.

$\beta$ 2-adrenoceptor stimulating drugs are also effective but their side effects also prevent their regular use (Akerlund, 1990).

Further investigations and research has been done on the efficacy of high - intensity transcutaneous nerve stimulation on primary dysmenorrhoea. Recent studies have shown that it is an effective and safe form of therapy especially for those patients who do not

want pharmacologic intervention and have the time to go for the treatment (Smith and Heltzel, 1991 and Milsom, Hedner and Mannheimer, 1994).

It is not clear why the remaining 15 % to 20% of patients do not have an adequate response to allopathic treatment and it is here where orthodox medicine looks again for a misdiagnosis of secondary dysmenorrhoea, possibly missing pelvic pathology. It also reviews any psychological problems and anxieties (Dawood, 1988).

Surgical intervention may be used as a last resort. Firstly it may be used as a diagnostic tool performing procedures such as laparoscopies and biopsies and secondly surgery is used, although rarely as a means of treatment, such as:

- Dilation of the cervix which according to Gold and Josimovich (1980) can lead to cervical trauma which in turn, leads to cervical incompetence and recurrent abortion of future pregnancies while premature onset of labor is another future complication.
- Laparoscopic diathermization of the uterosacral ligaments are also performed but recurrence of primary dysmenorrhoea is very frequent.
- Presacral neurectomy is one of medicine's last resort.
- Hysterectomies are also considered (Gold and Josimovich, 1980).

## 6. HOMEOPATHY AND PAST RESEARCH

As in the allopathic field, homeopathy also differentiates dysmenorrhoea into primary and secondary dysmenorrhoea.

According to Jouanny (1991) though, primary dysmenorrhoea is further divided into dystrophic and functional disorders. Dystrophic lesions caused by faulty development, nutrition and degenerations cannot be helped by homeopathy. Functional dysmenorrhoea though can be helped most effectively by homeopathy (Jouanny, 1991).

Jouanny (1991), goes on to divide functional dysmenorrhoea into a further four subdivisions according to the underlying aetiology. Hormonal dysfunction exhibits mainly precatamenial clinical manifestations, spasmodic dysmenorrhoea which classically occurs on the first day, neuro-vegetative abnormalities and psychogenic dysmenorrhoea, due to psychological conditions concerning the patient's sex life, are the four subdivisions.

Dysmenorrhoea due to hormonal dysfunction can be detected in a case history and confirmed with laboratory tests. Some signs and symptoms visible to the practitioner are painful periods accompanied by membranous discharge due to the hypertrophy of the inner membranous lining of the uterus together with other characteristic associating symptoms. The main homeopathic remedies used in such cases are: *Magnesia phosphorica*, *Viburnum opulus*, *Bromium*, *Cyclamen europaeum*, *Phytolacca decandra*, *Luteinum*, *Lac caninum*, *Lachesis mutus* and *Folliculinum*.

Spasmodic dysmenorrhoea exhibits particularly sharp pains on the first day of the period and persists as long as the flow is not fully established. The remedies used are: *Colocynthis*, *Magnesia phosphorica*, *Caulophyllum thalictroides* and *Dioscorea villosa*.



Neuro-vegetative dysmenorrhoea which links the physical and psychogenic aspects together utilizes remedies like: *Sabina*, *Secale cornutum*, *Actaea racemosa*, *Veratrum album*, *Trillium pendulum*, *Viburnum opulus*, *Calcarea phosphorica* and *Chamomilla vulgaris*.

Psychogenic dysmenorrhoea is associated with the psychological factors concerning the patient's sex life, from the problems of puberty to marital conflicts or others. The remedies most commonly used are: *Pulsatilla nigricans*, *Sepia officinalis*, *Lilium tigrinum*, *Murex purpurea*, *Moschus*, *Platina* and *Staphysagria*.

Other remedies used in past research were *Ovi gallinae pellicula*, *Ova tosta*, *Phytolacca decandra*, *Thlaspi bursa pastoris*, *Tilia tomentosa* and *Ustilago maidis* (Samuel, 1981). *Aconitum napellus*, *Borax*, *Gelsemium sempervirens* and *Hamamelis virginica* (Clarke, 1987) together with *Cocculus indicus*, *Helonias dioica* and *Nux vomica* (Horvilleur, 1990) are also used.

Samuel (1981) described the action of the remedies and to what symptom picture of the patients it fits. The statistical analysis was not mentioned regarding the treatment's effectiveness.

Dr Talati (1990) did extensive studies on the effects of potentised oestrogen and progesterone on dysmenorrhoea. He reported on fifteen of his case findings. Thirteen of the cases had 90% to 100% success with the remaining two patients dropping out. Despite the good results, Dr Talati expresses that this treatment has its drawbacks. That being that the correct selection of potencies at the different times of the month is a very long procedure therefore making it difficult to treat more than five patients at a time.

## 7. ALLOPATHIC VS HOMEOPATHIC TREATMENT

Primary dysmenorrhoea is a complex condition with so many internal and external factors playing a role. It is therefore important for the researcher to briefly view the differences between conventional and homeopathic approaches towards the patients and their condition in order to find the most appropriate and effective way to treat.

As mentioned previously, orthodox medicine proposes treatment in accordance to the proposed pathophysiology of the disease, severity of symptoms, age of patient, pattern of menstrual cycle and the need for contraception (Creatsas et al. 1990).

The majority of modern drugs are given for a definite physiological effect on some organ, or function of the body aimed at the individuals annoying symptoms (Hubbard, 1965).

The homeopathic physician takes all the above into account together with all other symptoms displayed on the three levels of existence: physical, mental and emotional. The basis of choosing the appropriate treatment is to obtain each patient's unique reaction to the disease, thus making homeopathy a very individualized form of therapy (Boiron, 1992).

Homeopathy treats by acting together with the body's reactions as the remedy/remedies, so carefully chosen, stimulates the patient's defense mechanism in order to make it work more effectively and to ultimately allow the body to heal itself (Jouanny, 1991).

## 8. THE PLACEBO EFFECT

This research proposed to determine the efficacy of homeopathic treatment on primary dysmenorrhoea. In order to obtain objective, non biased results, placebo was administered to half of the sample group (Smith, 1992). Comparative studies were then done amongst the control and treatment group.

It is vital for the researcher to know the effect of placebo on patients and to what extent it plays a role in the project and in past research.

Placebo means an inactive substance used in controlled studies for comparison with presumed active drugs or prescribed with the intent to relieve symptoms or meet a patient's demands i.e. a "make-believe medicine", allegedly inert and harmless (Berkow and Fletcher, 1992).

This placebo though has shown repeatedly to have had an effect on patients, involving both improvement and deterioration in functioning (Griffiths, 1981)

There is a placebo element in every therapeutic maneuver, including surgical and psychologic techniques or medication in any form. Thus the effects of any drug will vary from patient to patient and doctor to doctor, depending on the placebo reactivity. Studies to determine whether or not certain personality characteristics correlate with responses to placebos have disagreed extravagantly with one another (Berkow and Fletcher, 1992).

The remarkable list of subjective and objective changes due to placebo, has been put down to two possible components of the placebo response. The first component is that of anticipation and expectation associated with medication i.e. the "faith", or "hope" patients have. The second component is spontaneous change or natural history of the condition (Berkow and Fletcher, 1992).

The proportion of placebo responders in particular samples may vary from 0% to 100% although the number commonly falls in the 30% to 50% range (Jospe, 1978, Parkhouse, 1963, and Shapiro and Morris, 1978).

## 9. MEASUREMENT

Primary dysmenorrhoea is defined as pain associated with menstruation (Berkow and Fletcher, 1992), thus the pain felt by the patient is the researcher's primary concern. Associating symptoms which accompany the pain and menstruation are of less importance statistically but do nonetheless play a role in the interpretation of results (Reich, 1993).

The researcher had to find a well designed and reliable tool of measurement always taking into account that pain is a subjective sensation. The aim therefore, around the entire process of measurement, collection and extraction of data from the measuring tool, had to be as objective and non bias as possible.

The most objective form of measurement, being blood tests, were unobtainable due to financial constraints (Padayachi, 1995).

Several pain perception questionnaires with sophisticated rating techniques were analysed and reviewed. Amongst them were the visual analogue scales which allowed for too much interpretation on the patients side, SAD index was unfortunately more a clinical tool rather than a research instrument, the Self Rating Pain and Distress Scale is a fairly new tool, lacking in sufficient data on its reliability and validity and the Illness Behavior Questionnaire assesses maladaptive responses to pain and illness (McDowell and Newell, 1987).

Turskey's Pain Perception Profile has had extensive studies done on it proving to be the most detailed though mathematically complex pain measurement (McDowell and Newell, 1987).

Melzack's McGill Pain Questionnaire is the leading instrument for describing the various dimensions of pain. It is based on a clear theory of pain and has been widely used in many different countries, proving its reliability and validity. Since the beginning of this century pain has been seen as a purely sensory experience, yet Professor Melzack (1975) has noted that pain has a unique, distinctively unpleasant, affective quality that differentiates it from sensory experiences such as sight, hearing or touch.

The majority of pain questionnaires concentrate on intensity and duration of pain, but Melzack's McGill Pain Questionnaire gives a qualitative description of pain and of the patient's affective response to pain. Present pain pattern, accompanying symptoms and modifying factors, effects of pain and description of pain are all taken into account to provide an objective element in the measuring tool (Mc Dowel and Newell, 1987).

The McGill Pain Questionnaire provides quantitative information that can be treated statistically, it is sufficiently sensitive to detect differences among different methods to relieve pain and it provides information about the relative effects of a given manipulation on the sensory, affective and evaluative dimensions of pain (Melzack, 1975).

The effects of the pain was measured by the Social Impact and Disability Questionnaire which was based on the Oswestry Low Back Pain Disability Questionnaire. It indicated the extent to which a person's functional level is restricted by pain and associating symptoms (Mc Dowell and Newell, 1987).

## 10. SUMMARY

Primary dysmenorrhoea is one of the most common gynaecological complaints facing medicine today (Akerlund, 1990). Orthodox approach and treatment varies from basic home therapies, reassurance and physical amelioration to complex drugs, surgery and transcutaneous electrical nerve stimulation. The success rate also varies from patient to patient, and unwanted side effects accompany some form of therapies.

Primary dysmenorrhoea affects each woman differently displaying different symptoms and signs and exhibiting different degrees of severity which calls for individualized therapy (Parsons and Sommers, 1978). Homeopathic therapeutics involves individual symptoms in choosing the correct medicine, which then stimulates

the organism's reactions and works with them. Infinitesimal doses are used doing away with adverse side effects (Jouanny, 1991).

Homeopathy offers that individualism needed for the treatment of primary dysmenorrhoea. This research project will determine its efficacy.

# CHAPTER THREE:

## MATERIALS AND METHODS

### 3.1 CRITERIA GOVERNING THE ADMISSIBILITY OF PATIENTS

Thirty patients suffering from primary dysmenorrhoea were selected for this study.

Patients responded to advertisements on shopping mall bulletin boards, local and daily newspapers, Technikon Natal and Durban university campuses, family health and planning clinics, local sport clubs, gymnasiums, pharmacies and health shops.

Prior to patients taking part in the study, they had to sign a consent form and comply to certain criteria of the project:

3.1.1. Patients could not be over the age of thirty.

3.1.2. Patients were not allowed to take any other treatment other than the homeopathic medicines for the primary dysmenorrhoea.

3.2.3. Patients had to agree to go to a registered gynaecologist for an internal examination.

3.2.4. Patients could not be using an intrauterine device as a form of contraception.

3.2.5. Patients had to be from the greater Durban area.



## 3.2. CRITERIA GOVERNING THE ADMISSIBILITY OF THE DATA

3.2.1. Only data collected from the trial was accepted.

3.2.2. All interviews and external examinations were conducted by the researcher.

3.2.3. Only the reports, diagnosing the primary dysmenorrhoea of the patients, from registered gynaecologists were accepted.

3.2.4. All questionnaires were completed in the researcher's presence.

## 3.3. THE INSTRUMENTS

The data will be extracted using a questionnaire (Appendix 6) which will assess the patient's perception to the treatment.

The questionnaire is made up of two parts, altogether consisting of six sections, each obtaining data from different aspects of the primary dysmenorrhoea. Each section therefore will be treated separately and interpreted individually to extract its relevant information.

An Apple Macintosh computer will be used to capture and organise all data which will be stored on a spreadsheet (Microsoft Excel).

## 3.4. THE METHODOLOGY

Since the purpose of the study is to determine the degree of proficiency of homeopathic treatment on primary dysmenorrhoea in terms of the patient's perception to the treatment by obtaining

data concerning the patient's perception before and after treatment, the experimental method will be utilized as the methodology of choice.

In this method we are determining the influence of an independent variable (homeopathic treatment) on a dependent variable (the patients perception) whereby the independent variable is manipulated to measure the effect on the dependent variable.

The experimental design utilised in this study will be a single variable design as a control group is used to control the extraneous forces. The specific single variable design chosen is the 'before-and-after with control'.

Two test units (group of 15) are utilised, one acting as the control and the other acting as the treatment group.

The problem with the experimental method is that there is no control over the influence of extraneous forces which will cause secondary variations (e.g. daily stresses on the patients). This can be overcome by selecting sufficient number of test units at random. Randomisation means that a random selection process is used to assign the treatment within the experiment. By applying this process of randomisation all sources of extraneous variation are largely controlled because treatment variables are equally exposed and equally affected by exogenous factors.

### 3.5. METHOD OF PRESCRIBING

Frazer (1993) and Boyer (1994) suggested the following method of prescribing. The patient should be treated on a chronic deep acting level and an acute symptomatic level i.e. the symptomatic being the medicine given during the pain to act as the analgesic and the chronic being the medicine working consistently in the background for a long term curing effect (Appendix 5).

### 3.6. ADMINISTRATION

The following steps will be taken in the execution of the study:

1. Advertise for patients in the local and daily newspapers, surrounding shopping mall bulletins, family health and planning clinics, M.L. Sultan and Technikon Natal's notice boards, Durban's university campuses, pharmacies, health shops and surrounding health clubs/gyms.
2. Assess the patients according to the delimitations of the study.
3. A sample of thirty was chosen.
4. All thirty patients were sent to a registered gynaecologist for a clinical diagnosis of primary dysmenorrhoea.
5. Perform a complete medical and homeopathic case history (Appendix 7) and examination on all thirty patients.

6. On the first visit each patient completes the questionnaires under the researcher's supervision so as to ascertain a baseline of their symptoms.

7. Each case is then repertorised and checked by a qualified homeopath. Following that, the homeopathic prescriptions are then given to the pharmacist, a neutral member in the study.

8. The pharmacist then randomly divides the sample of thirty in half, dispensing placebo medicine to the one half of the sample and homeopathic medicine to the other half of the sample. The one group serving as the control group and the other as the treatment group. (The researcher will not be informed as to which patients are receiving the placebo or the homeopathic medicine, thus making this a double blind study).

9. The medicines are given to the respective patients the day after taking the case history, giving the researcher time to repertorise and consult with the significant personalities.

10. The patients attend a follow up consultation on the day of their next menses, allowing for a period of 20 to 35 days (depending on each women's menstrual cycle) between consultations.

Each patient's case history is re-evaluated and the physical examination is repeated to assess whether they should continue with their present medication or have their script altered to suit their clinical manifestations.

The questionnaires are completed again under the supervision of the researcher.

11. Altered and checked scripts are given to the pharmacist who administers the placebo or homeopathic medicine to the relevant patient.

12. Steps 10 and 11 are repeated seven times (eight consultations and questionnaires altogether).

13. All the data gathered will be analysed and interpreted and the hypothesis will be tested.

### 3.7. STATISTICAL ANALYSIS

The hypothesis will be tested using the following statistical tools: the unpaired T-test, the paired T-test and frequency on the Statgraphics computer package (Statgraphics Plus, Version 6 Manugistics, inc.).

### 3.8. PATIENT PERCEPTION ANALYSIS

Both treatment and control groups complete the patient perception questionnaires at each of the eight consultations throughout the trial period.

The questionnaires consist of six subsections altogether (S1, S2, S3, S4, S5 and S6).

Subsections S1 to S4 make up the Mc Gill Pain Questionnaire which has become one of the most widely used tests for the measurement of pain, the patient's perception to it and its treatment. It provides

information on the sensory, affective and evaluative dimensions of pain together with a brief description of the overall intensity (Melzack, 1975).

Subsections 5 and 6 make up the Concomitant and Social Impact Questionnaire which is based on the Semantic Differential Scale used primarily to measure a particular attitude. In this case the patients rate their concomitant symptoms and their general social activity restrictions due to the pain.

# CHAPTER FOUR:

## THE RESULTS

The Paired T-test was used to compare the initial questionnaire scores (visit 1) with the final questionnaire scores (visit 8) for both the treatment and control groups. The questionnaire scores are measured in points.

The lower the number of points per questionnaire, the more positive the results are, and vice versa.

The Un-paired T-test was used to compare the perception of treatment of the control group against that of the treatment group as well as reflect the changes at each visit for both groups.

When comparing the change that occurred at each visit between the control and treatment group, the analysis of the results is obtained by understanding that the larger the value the more positive the result.

e.g.  $V1=50$  and  $V2=30$  - there is an improvement because the value of  $V$  ( $V$ =visit) decreased. This can be seen mathematically, for example  $50-30=20$  i.e. there was an improvement of 20 points.

All the perception questionnaire totals (subproblem one) may be found in Appendix 1 and Appendix 2 and all data required to draw up the comparison figures (subproblem two) between the two groups may be found in Appendix 3 and Appendix 4.

## 4.1 HYPOTHESIS TESTING FOR SUBPROBLEM ONE

The Paired T-test was used to compare the questionnaire scores for the first (visit one) and final visit (visit eight) for both the treatment and control group.

TABLE 4.1.1

This table contains values of the first(visit one) and last(visit eight) questionnaire scores for the CONTROL GROUP. (Appendix 1)

PATIENT NUMBER	VISIT ONE	VISIT EIGHT
1	85	102
2	57	83
3	71	68
4	128	84
5	123	115
6	40	36
7	72	34
8	65	103
9	51	50
10	49	70
11	126	123
12	123	123
13	29	32
14	109	100
15	110	112



The Paired T-test was performed utilising the first and last set of values taken from table 4.1.1. The p value was calculated at 0.987 and therefore the null-hypothesis could not be rejected (i.e. there was no significant difference between the initial and final values).

FIGURE 4.1.1.

The following graph is derived from the values in table 4.1.1. and it demonstrates any change in the patient's perception to the treatment for each member of the CONTROL GROUP.

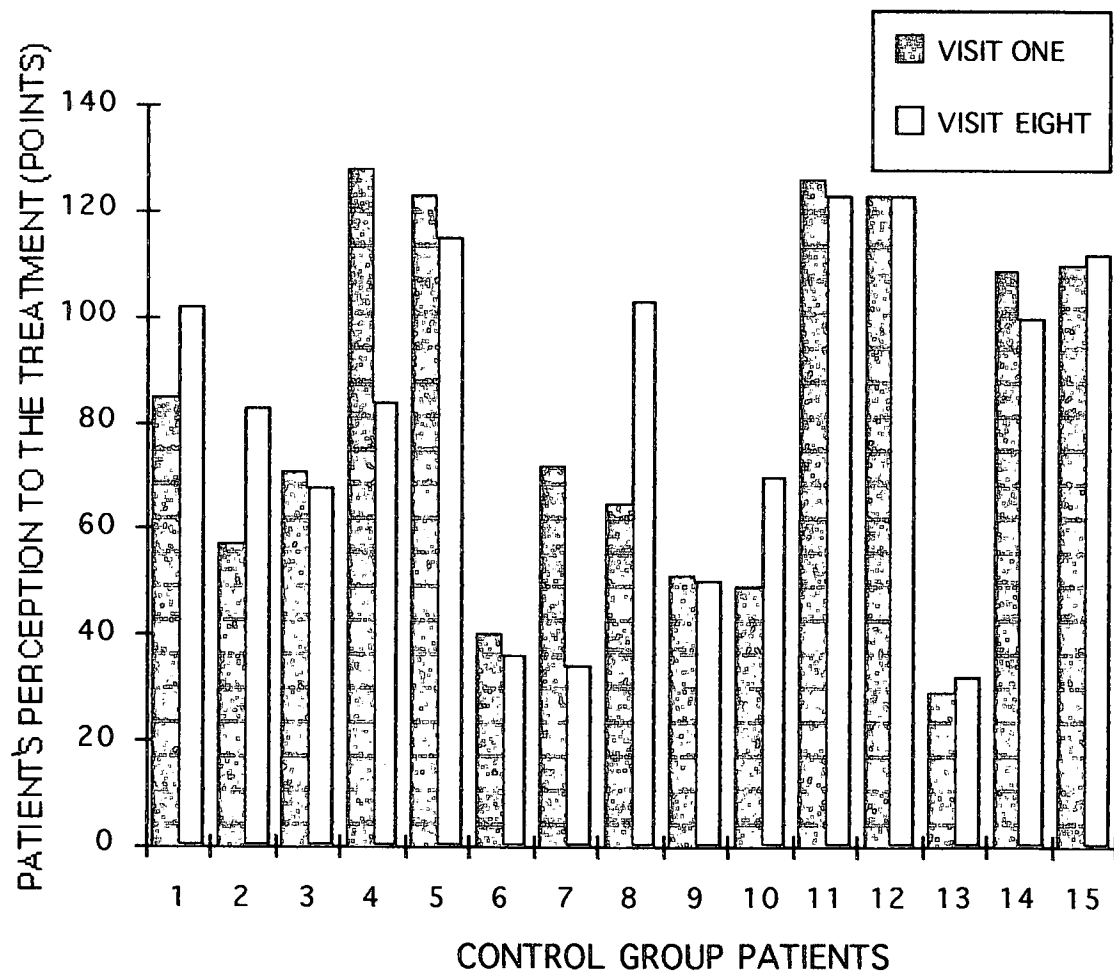


TABLE 4.1.2

Frequency table displaying rates of occurrence for the CONTROL GROUP.

GROUP	IMPROVED	NO CHANGE	WORSENERD	TOTAL
Control Group	8 (53.33%)	1 (6.66%)	6 (40%)	15 (100%)

TABLE 4.1.3.

This table contains values for the first and the last questionnaire scores for the TREATMENT GROUP. (Appendix 2)

TREATMENT GROUP	VISIT ONE	VISIT EIGHT
16	52	61
17	146	66
18	121	90
19	53	78
20	94	29
21	96	109
22	27	33
23	81	60
24	57	11
25	94	56
26	63	11
27	81	62
28	117	110
29	18	8
30	121	68

The Paired T-test was performed utilising the first and last set of values taken from table 4.1.3. The p value was calculated at 0.063 and therefore the null-hypothesis could not be rejected.

(i.e. there was no significant difference between the initial and final values).

FIGURE 4.1.2.

The following graph is derived from the values in the table 4.1.3. and it demonstrates any change in the patient's perception to the treatment for each member of the TREATMENT GROUP.

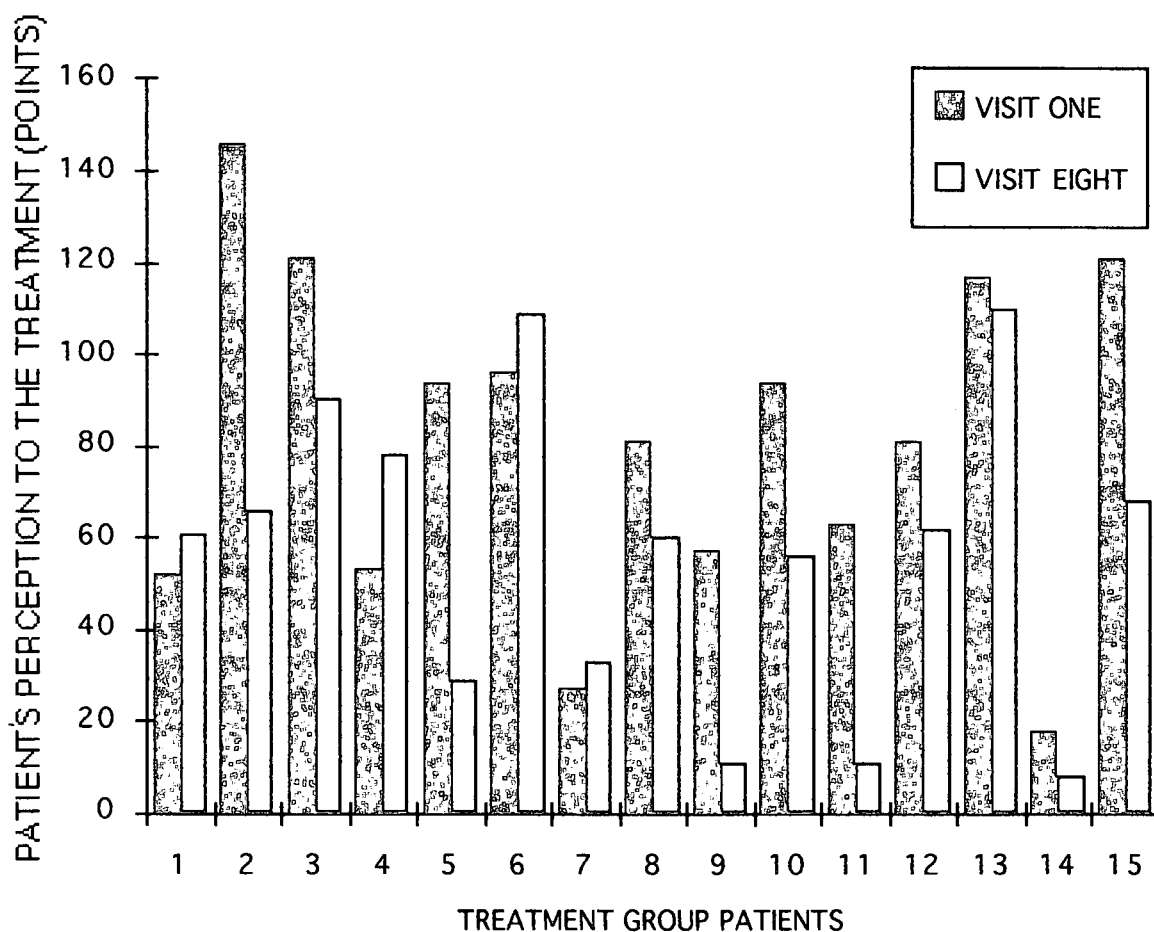


TABLE 4.1.4.

Frequency table displaying rates of occurrence for the  
TREATMENT GROUP.

GROUP	IMPROVED	NO CHANGE	WORSENERD	TOTAL
Treatment Group	11 (73.33%)	0 (0%)	4 (26.66%)	15 (100%)

## 4.2 HYPOTHESIS TESTING FOR SUBPROBLEM TWO

The UN-paired T-test was used to compare the perception of treatment of the control group against that of the treatment group as a whole.

The data used for this comparison was the figures refelecting the differences between visits for the control and treatment group i.e. all the grand totals ( $S1 + S2 + S3 + S4 + S5 + S6$ ) of all the patient's questionnaires in the control group, for visit two, were added together and subtracted from the grand total of all the patient's questionnaires in the control group for visit one. The end figure represents the difference between visit one and visit two. Therefore the more positive the end figure the better the result and vice versa.

The changes that occured at each subsection, at each visit for both control and treatment group were also analysed.

TABLE 4.2.1.

The values in this table represent the difference between each visit for the control and treatment group.

For example the figure 127 was obtained by: adding all the subsection totals for visit one and adding all the subsection totals for visit two for the control group (Appendix 3). The total for visit two was then subtracted from the total of visit one.

i.e. visit one :  $S1 + S2 + S3 + S4 + S5 + S6 = \text{TOTAL } 1$

:  $322 + 99 + 47 + 132 + 379 + 259 = 1238$

visit eight :  $S1 + S2 + S3 + S4 + S5 + S6 = \text{TOTAL } 2$

:  $304 + 86 + 48 + 120 + 348 + 205 = 1111$

TOTAL 1 - TOTAL 2 = DIFFERENCE BETWEEN VALUES

$1238 - 1111 = 127$

DBV	Cntl	Tx
V1-V2	127	338
V2-V3	53	63
V3-V4	136	30
V4-V5	-116	-32
V5-V6	33	111
V6-V7	-111	-93
V7-V8	-119	-48

The UN-paired T-test (2-tailed) was used to compare the perception to the treatment of the control group against that of the treatment group using the values from table 4.2.1.

The more positive the number is the greater the improvement.

$p = 0.466$  i.e. the Null Hypothesis could not be rejected and therefore there was no significant difference between the control and treatment group.

FIGURE 4.2.1.

This figure reflects the change in the patient's perception to the treatment at each visit for both treatment and control groups. The data was taken from table 4.2.1.

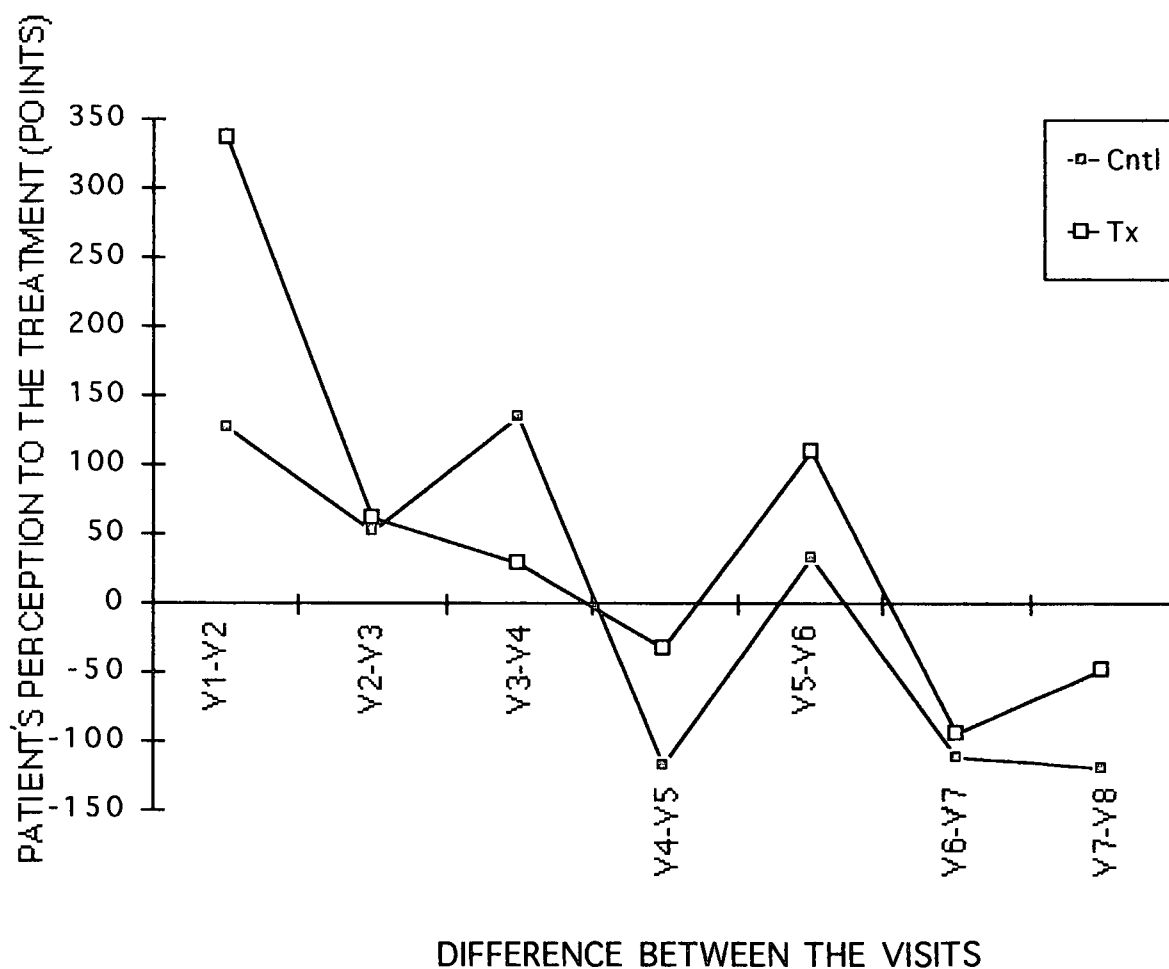




FIGURE 4.2.2.

This figure reflects the change, occurring for each subsection of the questionnaire at each visit for all the patients in the CONTROL GROUP. (Appendix 3)

The lower the points the more positive the results and vice versa.

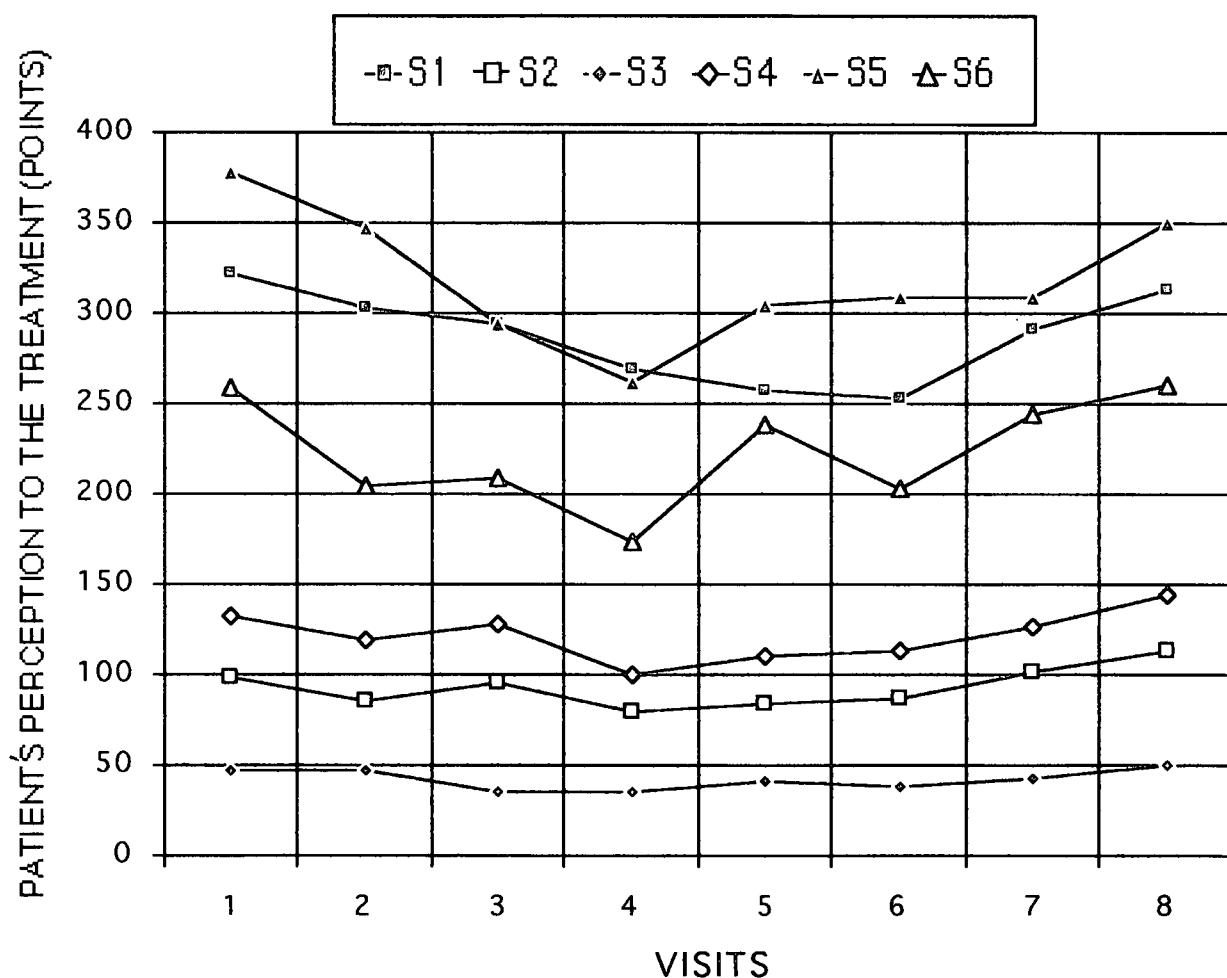
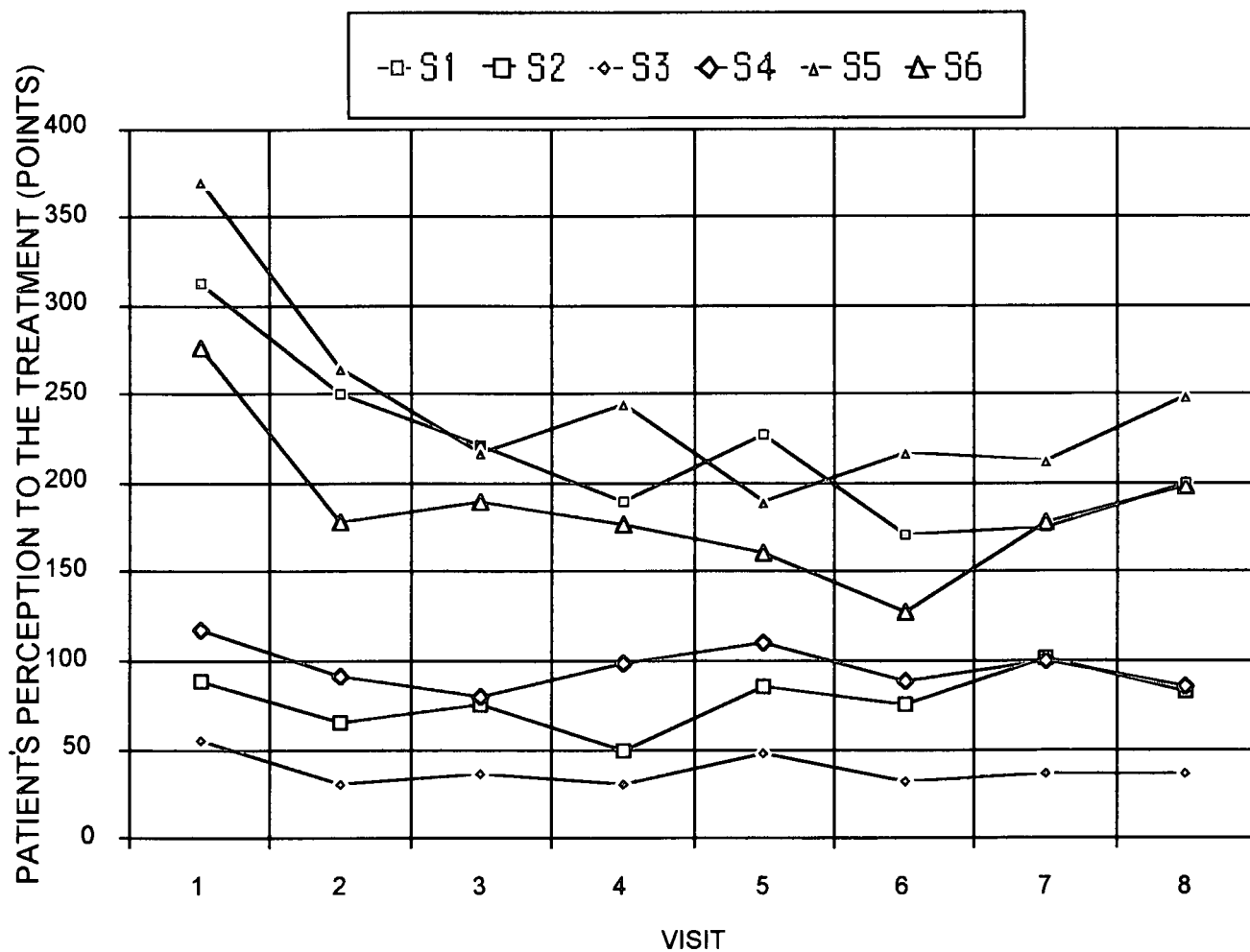


FIGURE 4.2.3.

This figure reflects the change, occurring for each subsection of the questionnaire at each visit for all the patients in the TREATMENT GROUP.  
(Appendix 4)



# CHAPTER FIVE:

## THE DISCUSSION

### 5.1. INTRODUCTION

The problem statement aimed at determining the impact of homeopathic treatment in primary dysmenorrhoea so as to ascertain the effectiveness of homeopathy in treating primary dysmenorrhoea. This was achieved in two ways i.e. subproblem one and two.

Subproblem one : Focuses on the patient's perception to the treatment.

Subproblem two : Focuses on the analysis and interpretation of the collected data.

A sample size of thirty patients was randomly divided into two equal groups by a homeopathic pharmacist, a neutral member of the study (Frazer, 1993). The first group consisting of fifteen patients, (1-15) called the *control group*, received placebo medication. The second group, consisting of the other fifteen patients (16-30) called the *treatment group*, received homeopathic medication.

## 5.2. SUBPROBLEM ONE

The paired T-test was used to compare the initial (visit 1) and final (visit 8) questionnaire scores for both the *control* and *treatment* groups.

5.1.1. Control group : A p value of 0.987 was calculated indicating that the initial (visit 1) and final (visit 8) perception questionnaire scores were not significantly different. Considering the frequency of occurrence; 53.33% of the patients improved, 40% of the patients worsened and 6.66% stayed the same.

5.1.2. Treatment group : A p value of 0.063 was calculated indicating that the initial (visit 1) and final (visit 8) perception questionnaire scores were not significantly different. Considering the frequency of occurrence; 73% of the patients improved, 0% stayed the same and 26.66% worsened.

It should be noted that the p value of the *treatment group* was closer to the value of 0.05 than the *control group* and therefore more significant (Reich, 1994). This is further confirmed by the fact that the *treatment group* had a greater percentage of improvement (73%) as opposed to the *control group* having a 53% improvement. The corollary of this is that the *control group* showed a greater number of patients worsening (40%) as opposed to the *treatment group* (0%).

### 5.3. SUBPROBLEM TWO

In this subproblem the data captured from the change in perception of the *control* and *treatment* group was compared and analysed.

Further analysis was done on the changes that took place within each subsection of the questionnaires at each visit for both *control* and *treatment* group.

The change in patient's perception to the treatment of the *control* group was compared to that of the *treatment* group using the UN-paired T-test and it was found with a significance level of 95% that the two groups were not significantly different ( $p=0.466$ ).

A comparison was made between each subsection of the questionnaire within the *control* and *treatment* group respectively as well as comparative studies between the subsections of the *control* and *treatment* group.

The questionnaire was made up of six subsections, S1, S2, S3, S4, S5, S6.

S1 measured the sensory qualities of pain such as the temporal and thermal sensations.

S2 measured the affective qualities of pain such as tension and fear.

S3 measured the evaluative qualities of pain i.e. the subjective overall intensity of the total pain experience.

S4 represents the most concise and meaningful set of words that represent important qualitative properties.

S5 measured the severity of accompanying symptoms.

S6 measured the physical and social restrictions.

In the *control group* S1 shows a change of eight points improvement, S2 worsened by fifteen points, S3 worsened by four points, S4 worsened by thirteen points, S5 improved by twenty three points and S6 improved by one point.

In the *treatment group* S1 improved by one hundred and thirteen points, S2 improved by six points, S3 improved by nineteen points, S4 improved by thirty one points, S5 improved by one hundred and twenty two points and S6 improved by seventy eight points.

In comparing the subsections of the *control* and *treatment group*, S1 of the *treatment group* showed greater improvement than the *control group*, S2, S3 and S4 of the *treatment group* showed an improvement as opposed to the worsening of the *control group's* respective sections and S5 and S6 shows the *treatment group* to have a greater improvement than the *control group*.

The significance of these changes is that each individual subsection represents a different facet of the pain experience as well as providing a closer look at its effect on the womens daily lives. By analysing this data for both treatment and control group, one can see which treatment protocol is acting, to what extent and where it is most effective.

#### 5.4. CONCLUSION

The *control group* improved by 53% and this can be attributed to the following factors; fatigue, stress and anxiety levels could have been lower during the trial period thus decreasing the pain or increasing coping mechanisms (Trattler, 1987 and Berkow and Fletcher, 1992), more physical activity (Trattler, 1987), as well as the result of the placebo effect (Griffiths, 1986 and Lawson and Richard, 1982). A combination of the above factors must also be considered.

The *control group* worsened by 40%. This could be the result of not taking real medication and/or not being influenced by the placebo effect (Griffiths, 1986).

The *treatment group* improved by 73% due to the homeopathic medication, the placebo effect or a combination of the two. Less stress and anxiety at menstruating times also contributes to lessen the pain (Trattler, 1987 and Berkow and Fletcher, 1992) or lessen the perception of pain level (Dawood, 1988). The interaction of doctor and patient also plays a role as the patient is assured that all is normal thus alleviating the psychogenic factor and fears they have of suffering a major pathology (Parsons and Sommers, 1978 and Holmlund, 1990).

The *treatment group* worsened by 26.66%. This could be attributed to the patient not complying with the rules and regulations concerning the storage, time and method of taking the medication. The researcher did though personally interview each member of

the sample, explaining the required protocol so as to minimize mistakes. Another factor that could play a role is that the wrong medication could have been prescribed. The probability of this though is low as each case history and prescription was inspected and approved by a qualified homeopath before the homeopathic medicines were dispensed. Although the researcher was present while the patient completed the questionnaires, it could have been filled in incorrectly due to the patients being embarrassed to ask the meaning of the words.

Despite the fact that both the homeopathic (treatment group) and placebo medicine (control group) did not show a significant statistical change within and between themselves in the improvement of primary dysmenorrhoea, it should be noted that the treatment group did show a higher percentage of improvement (23% more) over the control group.



## CHAPTER SIX :

### CONCLUSIONS AND RECOMMENDATIONS

#### CONCLUSIONS

The study proposed to determine the impact of homeopathic treatment in primary dysmenorrhoea, with reference to the patient's perception to the treatment, in order to determine how effective homeopathy is in treating primary dysmenorrhoea.

When the homeopathic treatment (treatment group) was compared to the placebo treatment (control group) in regard to the perception of the treatment there was no significant difference with either of the two groups.

The treatment group showed an improvement of 73% were the control group was 23% less, showing 53% improvement.

No toxic side effects were reported for the period of the study, when compared to other allopathic studies carried out in the field (Akerlund, 1990, Smith, 1988 and Robinson, Plichta and Weisman, 1992).

## RECOMMENDATIONS

Should further studies be carried out on this topic, it is recommended that a larger sample group be used so as to allow for further statistical manipulation and give more credibility to the study. This study was limited to a sample group of thirty due to financial restraints.

An objective form of measurement, for example a blood test, should be introduced in conjunction with the subjective analysis such as a questionnaire to allow for comparative studies amongst each other and to minimise bias.

Consideration should be given to patients using the contraceptive pill as a means of contraception. One cannot stop the patient from taking the pill despite its role in minimising menstrual pain (Akerlund, 1990 and Robinson, Plichta and Weisman, 1992). Possibly comparison studies could be done between a group on homeopathic treatment versus another group on the Pill thus doing away with the placebo group.

Although a control group (placebo) plays a role in scientific research and every type of treatment has a certain amount of placebo potential (Griffiths, 1981) it is ethically taxing on the researcher. The reason being that patients suffering from primary dysmenorrhoea experience varying degrees of pain leading to many being incapacitated (Berkow and Fletcher, 1992). The patient seeks help and volunteers to be part of the sample group and in some projects is aware of their fifty percent chance of placebo treatment

and in other studies the researcher chooses not to tell them. In the former as was done in this study, the patients were aware of their chances of being in the placebo group, as well as their delimitation of not taking any other analgesics for the pain. The question is, will they follow the prescribed protocol of taking, storing and handling medicines and how will this effect the number of patients dropping out of the project due to sheer desperation and pain?

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# APPENDICES

## APPENDIX 1

### SUB-PROBLEM ONE: CONTROL GROUP

This table contains data regarding the perception questionnaire of each of the patients receiving placebo medicine for the first and eighth month.

CONTROL      MONTH  
GROUP        ONE

Pt no	S1	S2	S3	S4	S5	S6	TOTAL
1	27	7	2	11	28	10	85
2	24	4	2	8	8	11	57
3	11	6	5	6	22	21	71
4	31	8	3	14	45	27	128
5	35	11	5	15	38	19	123
6	13	3	4	0	14	6	40
7	7	7	4	5	24	25	72
8	23	5	2	9	11	15	65
9	14	3	3	1	18	12	51
10	16	1	1	5	21	5	49
11	32	12	3	15	42	22	126
12	29	11	4	13	38	28	123
13	9	1	1	6	11	1	29
14	28	13	5	11	24	28	109
15	23	7	3	13	35	29	110
TOTAL	322	99	47	132	379	259	

CONTROL MONTH  
GROUP EIGHT

Pt no	S1	S2	S3	S4	S5	S6	TOTAL
1	32	13	4	8	27	18	102
2	24	5	2	14	20	18	83
3	13	4	5	6	19	21	68
4	20	7	3	9	27	18	84
5	34	10	5	14	34	18	115
6	13	2	3	2	10	6	36
7	7	1	2	1	11	12	34
8	27	10	4	12	30	20	103
9	13	3	2	9	8	15	50
10	18	9	4	10	20	9	70
11	31	12	3	14	39	24	123
12	28	12	4	12	40	27	123
13	8	2	1	9	10	2	32
14	25	14	4	11	22	24	100
15	21	10	5	14	34	28	112
TOTAL	314	114	51	145	351	260	

## APPENDIX 2

### SUB-PROBLEM ONE: TREATMENT GROUP

This table contains data regarding the perception questionnaire of each of the patients receiving homeopathic medicine for the first and final eighth month.

TREATMENT MONTH  
GROUP ONE

Pt no	S1	S2	S3	S4	S5	S6	TOTAL
1	12	1	1	3	24	11	52
2	38	10	5	15	50	28	146
3	30	12	4	10	38	27	121
4	14	3	4	8	14	10	53
5	26	7	5	14	23	19	94
6	26	8	5	5	23	29	96
7	4	0	3	2	11	7	27
8	20	3	4	6	29	19	81
9	21	9	3	6	11	7	57
10	21	8	3	11	28	23	94
11	18	4	5	7	16	13	63
12	16	5	4	5	26	25	81
13	32	9	5	11	31	29	117
14	8	0	0	2	5	3	18
15	27	10	4	12	42	26	121
TOTAL	313	89	55	117	371	276	

TREATMENT MONTH  
GROUP EIGHT

Pt no	S1	S2	S3	S4	S5	S6	TOTAL
1	11	9	3	5	22	11	61
2	21	8	1	4	20	12	66
3	15	6	3	12	29	25	90
4	17	13	4	10	17	17	78
5	3	3	0	2	20	1	29
6	25	9	5	10	28	32	109
7	9	3	3	3	9	6	33
8	12	3	2	5	22	16	60
9	3	2	1	2	2	1	11
10	11	4	2	8	16	15	56
11	4	1	1	2	2	1	11
12	15	4	3	3	20	17	62
13	33	9	4	12	25	27	110
14	4	1	1	0	0	2	8
15	17	8	3	8	17	15	68
TOTAL	200	83	36	86	249	198	

## APPENDIX 3

### SUB-PROBLEM TWO: CONTROL GROUP

This table contains data regarding all the patients subsection totals for the control group, for the duration of the eight month trial period.

CONTROL GROUP						
VISIT	S 1	S 2	S 3	S 4	S 5	S 6
1	322	99	47	132	379	259
2	304	86	48	120	348	205
3	295	96	35	129	294	209
4	269	80	36	101	262	174
5	258	84	42	110	305	239
6	253	87	38	114	309	204
7	291	102	43	127	309	244
8	314	114	51	145	351	260

## APPENDIX 4

### SUB-PROBLEM TWO: TREATMENT GROUP

This table contains data regarding all the patients subsection totals for the treatment group, for the duration of the eight month trial period.

TREATMENT GROUP						
VISIT	S 1	S 2	S 3	S 4	S 5	S 6
1	313	89	55	117	371	276
2	251	66	31	92	265	178
3	221	75	36	80	218	190
4	190	49	31	98	245	177
5	227	86	48	110	190	161
6	171	75	32	88	217	128
7	175	102	36	100	213	178
8	200	83	36	86	249	198

## APPENDIX 5

### TABLE OF REMEDIES

This table displays the various remedies used throughout the trial period on the treatment group. The remedies found under the heading Basic Remedies are the chronic remedies used and if there is more than one, this indicated that the chronic remedy changed over the eight months. The same holds true for the remedies found under the heading Local Remedies. i.e. the fact that more than one occur for each patient does not mean that they were all prescribed at the same time, but rather in various combinations over the eight month trial period. All remedies were prescribed according to Hahnemann's centissimal potencies (CH).



KEY FOR THE TABLE OF REMEDIES:

Arg. nit.	Argentum nitricum
Calc. c.	Calcareo carbonica
Coloc.	Colocynthis
Cup. m.	Cuprum metallicum
Foll.	Folliculinum
Ign.	Ignatia amara
Lac. c.	Lac caninum
Lyc.	Lycopodium
M. p.	Magnesia phosphorica
Nat. m.	Natrum muriaticum
Nux.v.	Nux vomica
Plat.	Platina
Puls.	Pulsatilla
Sab.	Sabina
Sep.	Sepia officinalis

Patient Number	Basic remedies	Local Remedies
1	Nat. m. 15	M.p. 7, Lac.c. 5
2	Nat.m. 15	M.p.7, Foll.15, Sep.9, Cup.m.9
3	Puls.15, Nat.m.15	M.p7, Cup.m.9, Foll.15
4	Calc.c. 15	M.p.7,Mag.p.9, Lac.c.5
5	Nat.m.15	Coloc.9, Foll.30, Lac.c.5
6	Puls.15	Lac.c.5, Plat.9, Foll.15, Sab.9
7	Pul.15, Puls.30, Ign.15	Foll.30, Lac.c.5, Mag.p.7
8	Sep.15	M.p.7, Act.r.9
9	Lyc.15	M.p.7
10	Calc.c.15	M.p.7, Sab.9
11	Puls.15	M.p.7, Foll.15
12	Nux.v.15, Lyc.15	M.p.7, Coloc.9, Sep.9, Nux.v.9, Stram.9
13	Nat.m.15	M.p.7, Foll.15, Sab.9
14	Arg.nit.15	Coloc.9, M.p.7, Foll.15
15	Puls.15	M.p.7, Foll.15, Cup.m.9

i) Thirsty / Not thirsty:

j) Itchy / Not itchy:

k) Seaside / Inland

l) Consolation / No consolation:

m) Morning upon awakening:

n) After meals:

o) Winter / Summer:

p) Strong pressure:

q) Dark:

r) Standing still:

## Differential Diagnosis

## APPENDIX 6

### QUESTIONNAIRE ON PATIENT'S PRIMARY DYSMENORRHOEA

#### IDENTIFYING DATA

*DATE:*

*NAME:*

*AGE:*

*RACE:*

*MARITAL STATUS:*

*OCCUPATION:*

#### INTRODUCTION

Primary dysmenorrhoea (painful menstruation) is one of the most common ailments encountered by most women, which to this day, despite such modern medical technology, still cannot be conclusively helped.

This research project will propose to determine the impact of homeopathic treatment on this condition and just how effective it is in alleviating the pain and associating symptoms. In order to do this, we appeal to you for assistance by becoming actively involved and informing us about your symptoms and their degree of intensity as well as their effect on your daily lives.

The questionnaire following will give you the opportunity to do just that and your honest and objective contribution will enable us to determine the effect of homeopathy on primary dysmenorrhoea and whether in fact homeopathy has a place in the medical arena for such treatment.

The demand for some successful, non-harming treatment for this condition is quite evident and growing. With your help we can determine the impact and effectiveness of homeopathy on primary dysmenorrhoea and whether we should accept or reject it as a form of treatment.

Thank you for the courtesy of your assistance.  
Natalie Tsolakis

## INSTRUCTIONS

- A. Your answers to this questionnaire will be regarded as strictly confidential and will be used for research purposes only.
- B. Please answer the questions as objectively as possible.
- C. Make sure you answer all the questions and do not skip any accidentally.
- D. Please read every question carefully before answering. If you have any queries, please ask for assistance from the researcher conducting the questionnaire.

## SECTION A

### THE MCGILL PAIN QUESTIONNAIRE

PatientsName:.....

Analgesic(s): ..... Dosage: ..... Time Given: ..... am/pm

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Analgesic Time Difference (hours): 4+ 1+ 2+ 3+

PRI: S..... A..... E..... M(S)..... M(AE)..... M(T)..... PRI(T).....  
 (1-10) (11-15) (16) (17-19) (20) (17-20) (1-20)

Please tick on the line provided, the appropriate word in each category (20 categories in total) which best describes your menstrual pain.

1. Flickering ___ Quivering ___ Pulsing ___ Throbbing ___ Beating ___ Pounding ___	11. Tiring ___ Exhausting ___
2. Jumping ___ Flashing ___ Shooting ___	12. Sickening ___ Suffocating ___
3. Pricking ___ Boring ___ Drilling ___ Stabbing ___ Lancinating	13. Fearful ___ Frightful ___ Terrifying ___
4. Sharp ___ Cutting ___ Lacerating ___	14. Punishing ___ Gruelling ___ Cruel ___ Vicious ___ Killing ___
5. Pinching ___ Pressing ___ Gnawing ___ Cramping ___ Crushing ___	15. Wretched ___ Blinding ___

6. Tugging __ Pulling __ Wrenching __	16. Annoying __ Troublesome __ Miserable __ Intense __ Unbearable __
7. Hot __ Burning __ Scalding __ Searing __	17. Spreading __ Radiating __ Penetrating __ Piercing __
8. Tingling __ Itching __ Smarting __ Stinging __	18. Tight __ Numb __ Drawing __ Squeezing __ Tearing __
9. Dull __ Sore __ Hurting __ Aching __ Heavy __	19. Cool __ Cold __ Freezing __
10. Tender __ Taut __ Rasping __ Splitting __	20. Nagging __ Nauseating __ Agonising __ Dreadful __ Torturing __

# THE SOCIAL IMPACT AND DISABILITY QUESTIONNAIRE

Please tick the appropriate answer under each heading

## Present Pain Intensity(PPI)

- |                        |                |
|------------------------|----------------|
| 0. No pain .....       | Comments:..... |
| 1. Mild .....          | .....          |
| 2. Discomforting ..... | .....          |
| 3. Distressing .....   | .....          |
| 4. Horrible .....      | .....          |
| 5. Excruciating .....  | .....          |

## Accompanying Symptoms

- |                    |               |
|--------------------|---------------|
| Nausea .....       | Comments..... |
| Headache .....     | .....         |
| Dizziness .....    | .....         |
| Drowsiness .....   | .....         |
| Constipation ..... | .....         |
| Diarrhoea .....    | .....         |

## Sleep

- |                   |                 |
|-------------------|-----------------|
| Good .....        | Comments: ..... |
| Fitful .....      | .....           |
| Can't Sleep ..... | .....           |



Activity

Good .....

Comments: .....

Some .....

.....

Little .....

.....

None .....

.....

Food Intake

Good .....

Comments: .....

Some .....

.....

Little .....

.....

None .....

.....

Pattern of Pain

Constant .....

Comments: .....

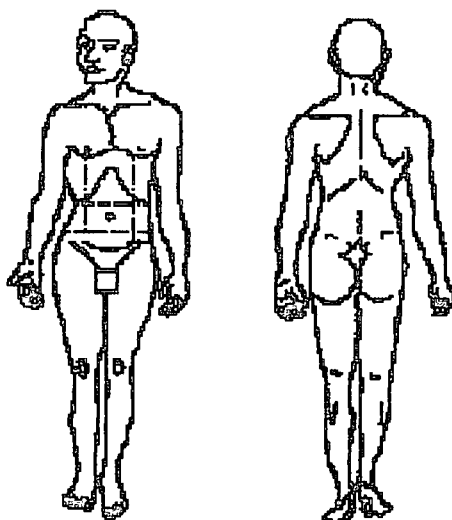
Periodic .....

.....

Brief .....

.....

Please indicate, on the diagrams below, the location of the pain and its radiation to any other areas.



## SECTION B

Each question in this section is graded, using a "Semantic Differential Scale" i.e. a scale consisting of six gradings, the highest (5) being the most severe/negative.

### Accompanying Symptoms

Place a cross over the number which best describes how you feel.

Nausea	severe .....	5	4	3	2	1	0	.....non existent
Vomiting	severe .....	5	4	3	2	1	0	.....non existent
Abdominal distention	severe .....	5	4	3	2	1	0	.....non existent
Painful breasts	severe .....	5	4	3	2	1	0	.....non existent
Headache	severe .....	5	4	3	2	1	0	.....non existent
Dizzy	severe .....	5	4	3	2	1	0	.....non existent
Drowsy	severe .....	5	4	3	2	1	0	.....non existent
Constipated	severe .....	5	4	3	2	1	0	.....non existent
Diarrhea	severe .....	5	4	3	2	1	0	.....non existent
Sweating	severe .....	5	4	3	2	1	0	.....non existent
Fainting	severe .....	5	4	3	2	1	0	.....non existent
Irritable	severe .....	5	4	3	2	1	0	.....non existent
Depressed	severe .....	5	4	3	2	1	0	.....non existent

## Disability Rating

Place a cross over the number, which best describes your limitations.

Walking	severely restricted/ .....	.....	.....	.....	.....	.....	not affected
	unable to walk	5	4	3	2	1	0
Travelling	severely restricted/ .....	.....	.....	.....	.....	.....	not affected
	unable to travel	5	4	3	2	1	0
Sitting	severely restricted/ .....	.....	.....	.....	.....	.....	not affected
	unable to sit	5	4	3	2	1	0
Standing	severely restricted/ .....	.....	.....	.....	.....	.....	not affected
	unable to stand	5	4	3	2	1	0
Sleeping	severely restricted/ .....	.....	.....	.....	.....	.....	not affected
	unable to sleep	5	4	3	2	1	0
Sex life	severely restricted/ .....	.....	.....	.....	.....	.....	not affected
	unable to have	5	4	3	2	1	0
	sexual relations						
Social life	severely restricted/ .....	.....	.....	.....	.....	.....	not affected
	unable to participate	5	4	3	2	1	0

## APPENDIX 7

### Standard Diagnostic Case History

Date of History:

#### Identifying Data

Name: *allergies* *alcohol/smoker* *TB*

Age:

Sex:

Race:

Place of birth:

Marital Status:

Occupation:

Religion:

Source of referral:

Source of History:

Reliability:

Past Surgical History:

Any operations since you were born ?

Past Medical History:

(Rheumatic fever, Pneumonia, Tuberculosis, Jaundice, High Blood Pressure)

1) Have you ever had any serious medical problems ?

(Mumps, Measles, Chicken Pox, German Measles, Tuberculosis)

2) Can you remember your childhood illnesses ?

3) Have you ever been in hospital for anything ?

4) Do you have any allergies ?

(Tetanus, Pertusis, Diphtheria, Polio, Measles, Rubella, Mumps, Influenza, Hepatitis B, Haemophilus influenza type B)  
5) What vaccinations/immunizations have you had recently or previously?

(Know: onset, duration, dosage)(Pill, vitamins, homeopathic medicine, minerals, herbs)  
6) Are you taking any medication ?

(Onset, Amount/Day, Type)  
7) Do you smoke ?

(Onset, Amount/Day, Type)  
8) Do you drink any form of alcohol ?

### **Family History:**

1/ Are both your parents alive ?

1.1/ Did/Do any of them have any medical problems ?

1.2/ If either of them died, why ? and when ?

2/ Do you have any siblings and are they all alive ?

2.1/ If not how did they die and when ?

2.2/ Did your siblings have any medical problems ?

3/ Do you have any children, and are they all alive ?

3.1/ Do any of your children have any medical problems?

Possible family medical problems : Diabetes, Tuberculosis, Heart Diseases, High Blood pressure, Stroke, Kidney Disease, Cancer, Arthritis, Anaemia, Headaches, Epilepsy, Mental illness.

(Duration)

Main Complaint: What seems to be the problem today ?

(Onset, Location, Aetiology, Duration, Character, Modalities, Concomitants, Radiation, Patient's response to Symptoms & incapacities)  
History of the Main Complaint:

(Onset, Aetiology, Location, Character, Duration, Modalities, Associated manifestations, Radiation, Patient's response to Symptoms and incapacities)

Principle Symptoms:

Social History: 1/ Hobbies, exercise and leisure activities ?

2/ Any travelling (i.e. out of Durban) ?

3/ Any recent shocks or griefs ?

4/ Sleep patterns ?

5/ Diet ?

Psychosocial History: 1/ Home situation and significant others?

2/ Daily life ?

3/ Important experiences ?

4/ Religious beliefs ?

5/ The Patient's outlook ?

Summary of thoughts and hypothesis:

Systems review;

(Usual Weight, Recent Weight change, Weakness, Fatigue, Fever)

1) General :

(Rashes, Lumps, Sores, Itching, Dryness, Colour change, Changes in hair & nails)

**2) Skin:**

(Headaches, Head injuries)

**3) Head:**

(Vision, Glasses, Contact lenses, Pain, Extensive tearing, Redness, Double vision, Cataracts)

**4) Eyes:**

(Hearing problems, Tinnitus, Vertigo, Earache, Infection, Discharge)

**5) Ears:**

(Frequency of colds, Nasal stuffiness, Discharge or itching, Hayfever, Nose bleeds, Sinus trouble)

**6) Nose & Sinuses:**

(Bleeding gums, Sore tongue, Frequency of sore throat, Hoarseness)

**7) Mouth & Throat:**

(Swollen glands, Pain or stiffness in the neck)

**8) Neck:**

(Cough, Sputum, Haemoptysis, Wheezing, Asthma, Bronchitis, Emphysema, Pneumonia, Tuberculosis, Pleurisy)

**9) Respiratory system:**

(Heart trouble, High Blood pressure, Rheumatic fever, Heart murmurs, Chest pain or discomfort, Palpitations, Dyspnea, Orthopnea, Paroxysmal nocturnal dyspnea, Oedema, Any heart tests)

**10) Cardiac system:**

(Any trouble swallowing, Heartburn, Loss of appetite, Nausea, Vomiting, Regurgitation, Vomiting of blood, Indigestion, Haemorrhoids, Constipation, Diarrhoea, Abdominal pain, Food intolerance, Excessive belching or passing of gas, Jaundice, Liver or gall bladder trouble, Hepatitis)

**11) Gastrointestinal system:**

(Polyuria, Nocturia, Burning or Pain on urination, Haematuria, Urgency, Hesitancy, Incontinence, Urinary infection, Stones)

**12) Urinary system:**

(Hernias, Discharge from or sores on the penis, Testicular Pain or masses, History of venereal Disease, Sexual interest)

**13) Genitoreproductive system:**

(Intermittent claudication, Leg cramps, Varicose veins, Thrombophlebitis)

**14) Peripheral Vascular system:**

(Muscular and joint Pains, Stiffness, Arthritis, Gout, Backache)

**15) Musculoskeletal system:**

(Fainting, Blackouts, Seizures, Weakness, Paralysis, Numbness, Tingling, Tremor or other involuntary movements)

**16) Neurological system:**

(Anemia, Easy bruising or bleeding, Past transfusions & possible reactions)

**17) Haematologic system:**

(Thyroid trouble, Heat or cold intolerance, Excessive sweating, Diabetes, Excessive thirst or hunger, Polyuria)

**18) Endocrine system:**

(Nervousness, Tension, Depression, Memory loss)

**19) Psychiatric:**



## **On Examination (O/E):**

### **Vital Sign's;**

Pulse:

Respiration:

Blood pressure:

Temperature (°C):

Weight & Height:

(Observe the state of health, stature, sexual development, posture, motor activity & gait, dress, grooming & personal hygiene, odours of body or breath. Facial expression, manner, affect, reaction to person and things in the environment. Listen to patient's speech, note state of awareness and level of consciousness)

### **General inspection:**

### **General examination:**

#### **1) Position the Patient on their backs at 45°**

(NOTE: Muscle condition, colour, nails [clubbing, spooned, splinter haemorrhage], sweat, temperature, circulation, any nodules, any lesions, joint pain)

#### **2) Hands:**

( Hair distribution, Colour, Temperature, Muscle condition, Skin lesions, any pain)

#### **3) Forearm->Arm->Shoulder:**

(Neck stiffness, Thyroid gland, Tracheal deviation, Jugular Venous Pressure, Glands, any Pain)

#### **4) Neck:**

(Twitches of facial muscles, drooping, swellings, lesions, inflammation, skin, hair distribution, Colour, any Pain)

#### **5) Face:**

(Ophthalmoscopic examination, visual acuity, pupil reaction to light, extra ocular muscle movement, any pain)

**6) Eyes:**

(Anosmia, any pain, Epistaxis, Runny nose, Hayfever, Lesions)

**7) Nose:**

(Pain, Headaches, Post nasal drip)

**8) Sinuses:**

(Colour, Lesions, Pain)

**9) Lips:**

(Bad breath, Taste, Lesions, Pain)

**10) Mouth:**

(Condition, Pain, Colour, Caries, Types of fillings)

**11) Teeth:**

(Bleeding, Colour)

**12) Gums:**

(Indentations, Colour, Mapped, Pain, Lesions, Taste)

**13) Tongue:**

(Inflammation, Pain, Tonsils, Deposits, Voice)

**14) Throat:**

(Hearing, Lesions, Pain, Tympanic membrane, Wax colour)

**15) Ears:**

(Skin, Lesions, Hair distribution, Chest wall movement and shape, Respiratory rate, depth, rhythm & effort; Tender areas, Tactile fremitus, Percussion, Auscultation)

**16) Thorax and Lungs:**

(Rate, Rhythm, Amplitude, Contour, Bruits, Thrills)

**17) Heart:**

(Pain, Tender areas, Skin, Spider nevi, Distention, Borborygmi, Liver, Kidneys, Spleen, Rebound tenderness, Muscle guarding)

**18) Abdomen:**

(Skin, Lesions, Pain, Contour of spine, Moles, Kidney Pain)

**19) Back:**

(Only if indicated, Glands, Sexual development, Lesions, Skin, Pain)

**20) Pelvis & Perineum:**

(Pain, Skin, Hair distribution, Oedema, Varicose veins, Temperature, Colour/Filling, Sensory)

**21) Lower limbs:**

(Nails, Temperature, Colour, Skin, Pain, Lesions, Warts, Athletes foot, Odour)

**22) Feet:**

**Additional homeopathic questions:**

***Mind;***

**1) Fears:**

(Position, Type, Dreams, On waking)

**2) Sleep:**

**3) Confusion/Cloudiness:**

**4) Excitement:**

**5) Anxiety:**

(Hurried, Nasal, Lost/Difficult, Slow/Monotonous)

**6) Speech:**

**7) Imagination:**

**8) Memory:**

***Emotions;***

**1) Depression:**

**2) Melancholia:**

**3) Mood:**

***Physical;***

**(Cravings, Aversions, Add salt, Drink in gulps or sips, Hot or cold drinks, Love eggs)**

**1) Diet:**

**2) Best time of day:**

**3) Coast or inland:**

**(Arsenicum album)**

**4) Particular:**

**(Calcareo carbonica)**

**5) Brittle hair:**

**6) Modalities:**

**a) Cold / Warmth:**

**b) Movement / Rest:**

**c) Touch:**

**d) Inside / Outside:**

**e) Riding in car:**

**f) Humidity / Dryness:**

**g) Sitting still / Changing position:**

**h) Time of day:**