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**AN OBSERVATIONAL STUDY ON THE EFFICACY OF INDIVIDUALISED  
HOMEOPATHIC TREATMENT ON PREMENSTRUAL SYNDROME IN INDIAN  
FEMALES**

A research dissertation presented to the Faculty of Health Sciences, University of Johannesburg, as  
partial fulfilment for the Masters Degree in Technology Homoeopathy by:



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## ABSTRACT

Premenstrual Syndrome (PMS) is a group of physical, mental and behavioural symptoms that occur cyclically through the luteal phase of the menstrual cycle and resolve within three days of the onset of menstruation. More women are affected by the physical and psychological symptoms of premenstrual syndrome than any other condition. A study done by Brohi *et al.* (2011) showed that PMS is a common problem that occurs in 81.25% of women and has an adverse impact on a woman's quality of life. The symptoms of PMS can change the behavior and wellbeing of women which has an impact on families, social life and work. Research has shown that women with PMS reported additional days missed from work compared to women that do not suffer with PMS. A study done by Brohi *et al.* (2011) showed that PMS is a common problem that occurs in 81.25% of women and has an adverse impact on a woman's quality of life. Conventional treatment is limited, not always effective and is associated with many side effects. Research using individualised homeopathic treatment in PMS has been shown to be effective, however there have not been any studies done on homeopathic treatment in Indian females in South Africa.

The aim of this observational study was to determine the efficacy of individualised homeopathic treatment on females of Indian origin in South Africa who were suffering with symptoms of PMS using case studies and a PMS grading chart.

This was a 12 week individualised homeopathic study conducted at the Homeopathic Health Training Centre on the UJ Doornfontein Campus. South African Indian females between 18-40 years of age were recruited using advertisements in the form of posters. Ten South African Indian females participated in this study. Each participant attended a total of four consultations over a 12 week period. During the first consultation the researcher explained the study to the individuals who met the criteria based on the selection questionnaire, they were then requested to sign the Participant Information and Consent Form. A full case history was taken using a standard homeopathic case taking form. Participants were required to score their daily symptoms on a PMS chart from the beginning of each menstrual cycle until the beginning of the next cycle. A baseline of each participant's premenstrual symptoms was established by an initial treatment free month. During the follow up consultations (week 4, 8 and end of week 12) the PMS charts were collected, and a case taking and relevant physical examinations were completed. At the end of the consultation in week 4 and 8 an individualised homeopathic remedy was prescribed. At the final consultation (week 12) no

remedy was prescribed. Remedies were dispensed in number eight vials by the Homeopathic Health Training Centre.

Data collected and analysed from the PMS grading chart was statistically and graphically presented using the Friedman test to compare the severity of symptoms experienced in the premenstrual period (14 days before menstruation) the baseline symptoms recorded in the initial treatment free period for each symptom over the 2 month treatment period. Wilcoxon Signed Ranks test was done to determine where the differences had occurred.

The individualised homeopathic remedy showed statistically significant improvements (P values < 0.05) when using Friedman test results for the following symptoms: irritability (P=0.000), depression (P=0.033), breast swelling (P=0.004), headaches (P=0.013) and food cravings (P=0.004) over the two month treatment period. However the individualised homeopathic remedy showed no significant improvement (P values > 0.05) in the following symptoms: anxiety (P=0.602), breast tenderness (P=0.360), abdominal bloating (P=0.058) and swelling of extremities (P=0.072) over the 2 month treatment period. However, research for a longer study period and larger study sample should be conducted before any definitive conclusions can be drawn.

## **DEDICATION**

To my loving parents Faizel and Fatima Bulbulia, my grandparents, my brothers Masood and Muhammed Saood Bulbulia and my amazing husband Mohammed Ismail Saloojee for all the love, support and encouragement you have given me throughout this degree.



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# CHAPTER ONE

## 1. INTRODUCTION

### 1.1 Problem Statement

Premenstrual syndrome (PMS) is a group of behavioural, psychological, and physical symptoms that occur in the luteal phase, which is the phase between ovulation and the onset of menses, and remit in the follicular phase of the cycle which is the start of menses (Brahmbhatt *et al.*, 2013). According to Stoddard *et al.* (2007) “. . . [women] have between 400 and 500 menstrual cycles over their reproductive years, and since premenstrual distress symptoms peak during the 4–7 days prior to menses, consistently symptomatic women may spend from 4 to 10 years of their lives in a state of compromised physical functioning and/or psychological well-being.” This in turn has a negative effect on the Quality of Life (QOL) of women with PMS in a negative way by affecting the way that they behave (Lustyk and Gerrish, 2010). PMS affects approximately 75% of females who are of reproductive age, and there are no optimal treatment options for PMS (Steiner *et al.*, 2006). A study that was done on Indian adolescent females found that more than half (63.1%) of the participants had one or more symptoms of PMS (Sharma *et al.*, 2008). Conventional treatment is limited, not always effective and is associated with many side effects (Zaka and Mahmood, 2012). Research using individualised homeopathic treatment, known as the homeopathic simillimum, in PMS has been shown to be well tolerated and showed a positive impact on the symptoms of PMS although further research is warranted (Danno *et al.*, 2012). There have not been any studies done on homeopathic treatment in Indian females in South Africa.

### 1.2 Purpose of the study

The aim of this observational study was to determine the efficacy of individualised homeopathic treatment in South African Indian females that were suffering with symptoms of PMS by means of using a PMS chart and descriptive case studies.

### 1.3 Hypothesis

It was hypothesised that individualised homeopathic treatment would be effective in alleviating PMS symptoms in Indian females.



#### **1.4 Null Hypothesis**

It was hypothesised that individualised homeopathic treatment would not be effective in the treatment of PMS in Indian females.

#### **1.5 Delaminations**

- The supervising clinician prescribed individualised remedies that suit each participant, according to homeopathic prescription.
- The homeopathic remedy was given in the same potency, with the same frequency when administered (i.e. 6 cH twice daily and 30 cH once daily).
- No additional information such as lifestyle changes, exercise regimes, nutritional programmes, supplements, herbal remedies or any other medications were provided.

#### **1.6 Assumptions**

It was assumed that:

- During consultations as well as in the PMS charts participants revealed their symptoms honestly and correctly.
- Participants were compliant when filling out the PMS chart on a daily basis.
- Remedies were used in the prescribed manner by the participant.
- No medications such as allopathic, herbal or homeopathic medication were taken while on the study. If however medication was taken by the participant, they disclosed this information to the researcher.
- Participants did not digress from their normal diet, exercise and lifestyle habits.
- The remedies that were used were prepared according to a recognised pharmacopeia and were dispensed correctly by the researcher or dispenser.

## CHAPTER TWO

### 2. LITERATURE REVIEW

#### 2.1 Premenstrual Syndrome (PMS)

##### 2.1.1 Definition

Premenstrual syndrome (PMS) is a broad term which includes a group of emotional, behavioural and physical symptoms that occur in the luteal phase of the menstrual cycle and subside in the follicular phase of the menstrual cycle (Freeman, 2003).

##### 2.1.2 Symptoms

There are many symptoms that can occur during PMS. These include emotional, physical and behavioural symptoms. Emotional symptoms include: irritability, mood swings, anxiety, depression and a feeling of being out of control. Physical symptoms include: swelling, breast tenderness, headaches, bloating and weight gain. Behavioural symptoms include: sleep disturbances, appetite changes, poor concentration, decreased interest in activities and social withdrawal (Freeman, 2003).

##### 2.1.2.1 Classification

Table 2.1 describes the most common symptoms that women with PMS complain about. These symptoms can be divided into 5 subgroups (Moreno, 2006).

**Table 2.1 Classification of PMS symptoms**

| Category of PMS        | Symptoms   |
|------------------------|--|
| Type A<br>(Anxiety)    | Difficulty sleeping, tense feelings, irritability, clumsiness, mood swings   |
| Type C<br>(Craving)    | Headache, cravings for sweet foods, cravings for salty foods, cravings for other types of food   |
| Type D<br>(Depression) | Depression, angry feelings for no reason, feelings that are easily upset, poor concentration or memory, feelings of low self-worth, violent feelings |
| Type H<br>(Hydration)  | Weight gain, abdominal bloating, breast tenderness, swelling of extremities  |

|                   |  |
|-------------------|--|
| Type O<br>(Other) | Dysmenorrhea, change in bowel habits, frequent urination, hot flushes or cold sweats, general aches or pains, nausea, acne, allergic reactions, upper respiratory infections |
|-------------------|--|

## 2.2 Physiology of the female menstrual cycle

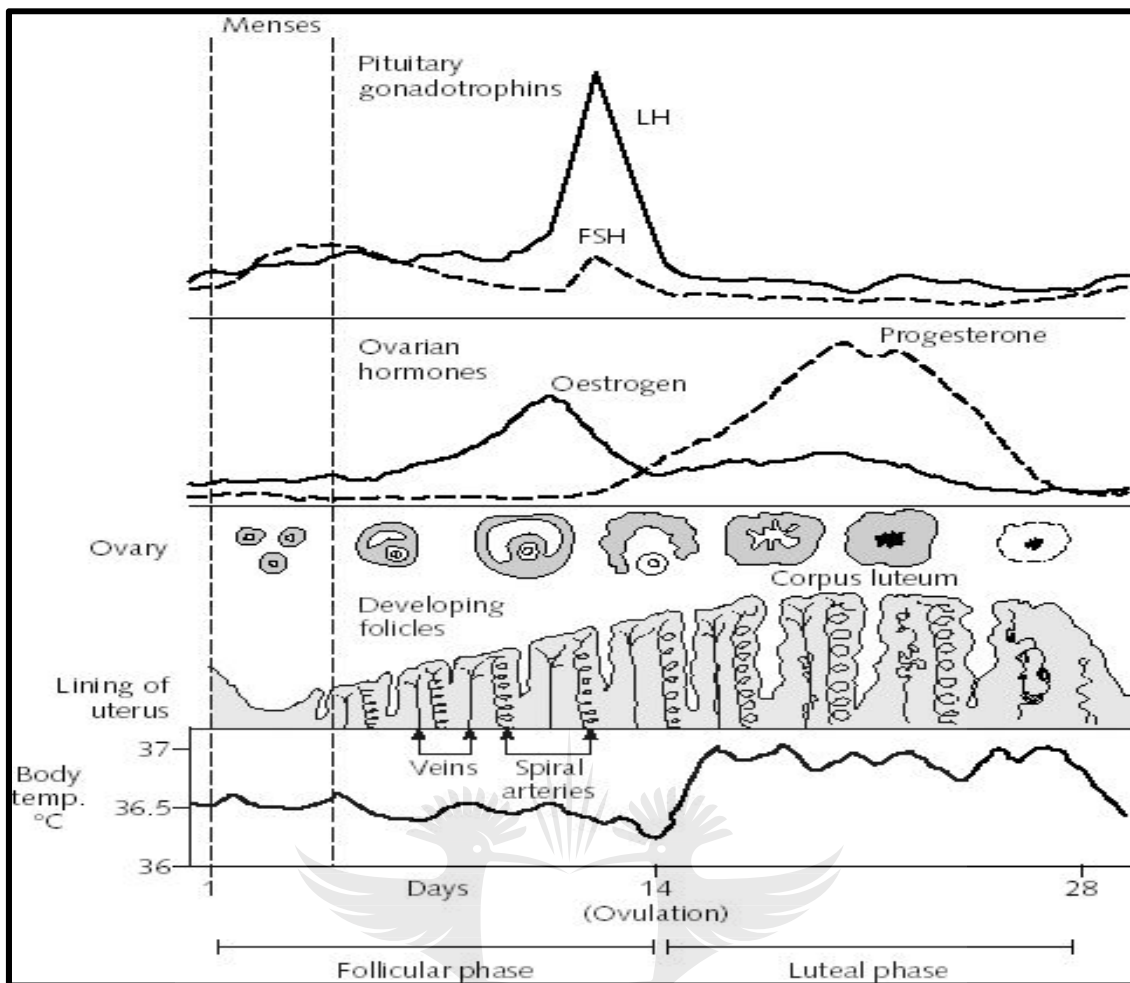
Menstruation is shedding of the lining of the uterus, known as the endometrium, which is accompanied by bleeding. The first day of bleeding is considered as the first day of the menstrual cycle, and the cycle ends just before the beginning of the next menstrual period. The hormones that are involved in the menstrual cycle include luteinizing hormone (LH), follicle stimulating hormone (FSH), oestrogen and progesterone which are produced by the pituitary gland and ovaries respectively.

The menstrual cycle has three phases: follicular, ovulatory and luteal.

*The follicular phase of the menstrual cycle starts from day one of menstruation and ends before ovulation. It is called the pre-ovulatory phase (Martini, 2004).* After the start of the menstrual period the pituitary gland releases FSH which stimulates the development of a few primordial follicles into primary follicles in the ovary. As the primary follicles develop, they start to produce oestrogen. As the levels of oestrogen rise the pituitary gland stops the secretion of FSH. Increased levels of oestrogen cause the proliferation of the endometrium which is in the uterus. Only one of these primary follicles will develop into a mature follicle. As the follicle matures more oestrogen is produced.

*The ovulatory phase usually occurs around day 14 of a normal 28 day menstrual cycle (Martini, 2004).* When the oestrogen levels reach a threshold level, LH is released by the anterior pituitary gland this triggers the rupture of the mature follicle at the surface of the ovary causing the egg to be released into the pelvic cavity.

*The final phase of the menstrual cycle is the luteal or post ovulatory phase, and runs from after ovulation until before the next menstruation (Martini, 2004).* The mature empty follicle collapses and then becomes the corpus luteum which makes the hormone progesterone that is responsible for the endometrium to mature. This allows for the implantation of the fertilised egg. If implantation does not occur then the corpus luteum degenerates. Progesterone and oestrogen levels fall intensely, causing the endometrial tissue to deteriorate and the menstrual period follows (Colledge *et al.*, 2010).



**Figure 1.** Menstrual cycle (longtron.altervista.org)

### 2.3 Aetiology of PMS

The aetiology of PMS is unknown and can be considered to be multifactorial (Oats and Abrahams, 2012). Factors that contribute to the aetiology of PMS include: genetics, the interaction of cyclical changes in oestrogen and progesterone; adrenalin, allopregnanolone and prolactin; neurotransmitters, including serotonin and gamma amino butyric acid (GABA); diet and lifestyle factors (Zaka and Mahmood, 2012).

#### 2.3.1 Genetics

Genetics play a role in PMS. Studies have shown increased PMS traits among monozygotic twins compared to dizygotic twins; however no studies have been done to determine if single genes or multiple genes play a larger role in PMS. It is thought that a genetic inclination towards PMS occurs due to central nervous system (CNS) deregulation that is involved in the menstrual cycle (Bahamondes *et al.*, 2007).

## 2.3.2 Hormones

### 2.3.2.1 Ovarian hormones

Differences in ovarian hormones during the menstrual cycle seem to have an effect on the symptoms of PMS. This only arises in women of reproductive age who have ovulatory cycles. These PMS symptoms have a tendency to be severe during the luteal phase when there is an increase in serum progesterone. In postmenopausal women that are on hormone replacement therapy (HRT), the symptoms of PMS can redevelop during the progesterone phase of their treatment (Backstrom *et al.*, 2003).

PMS has a cyclical nature and often symptoms disappear when anovulation is induced. Stopping ovarian function by doing an oophorectomy or using gonadotropin releasing hormone (GnRH) agonists leads to abolition of the symptoms of PMS (Backstrom *et al.*, 2003).

Oestradiol also appears to have a negative impact on the severity of symptoms. Taking oestradiol during the luteal phase of the menstrual cycle has been shown to produce more premenstrual symptoms compared to placebo. PMS symptoms tend to be more severe with greater doses of oestradiol when it is used in combination with progesterone in HRT. These ovarian hormones seem to produce their effects through their actions on the serotonergic and gamma-amino butyric acid (GABA) systems (Backstrom *et al.*, 2003).

### 2.3.2.2 Excess Adrenaline

The adrenal glands produce adrenaline using progesterone. Therefore in a stressful situation the body requires more adrenaline and in turn more progesterone. The excess adrenalin can cause a deficiency in progesterone and therefore an oestrogen-progesterone imbalance, which may cause premenstrual symptoms (Glenville, 2002).

### 2.3.2.3 Allopregnanolone

Allopregnanolone is a metabolite of progesterone. Normally the levels of allopregnanolone are usually high; however these levels are low in the follicular and luteal phases of the menstrual cycle. This could be due to the impaired synthesis of allopregnanolone by the corpus luteum and other steroidgenic organs. Allopregnanolone may lead to negative mood symptoms at either high or low levels. At high levels, allopregnanolone produces anxiolytic, anti-aggressive, sedative and anti-epileptic effects. At low levels allopregnanolone causes severe emotional reactions (anxiety)

in certain individuals, and therefore may contribute to premenstrual symptoms (Usman *et al.*, 2008; Backstrom *et al.*, 2003).

#### 2.3.2.4 Prolactin

Prolactin is produced in the pituitary gland and stimulates the growth and development of breast tissue. If the pituitary gland produces an increased amount of prolactin it will lead to symptoms such as breast tenderness, lumpiness and enlargement of the breasts. This may cause an imbalance in the levels of oestrogen and progesterone produced in the body and will have an effect on mood (Hayman, 1996). Some studies also suggest that the levels of prolactin are not altered in women with PMS; however the timing of the excretion of prolactin might be abnormal in women with PMS (Yonkers *et al.*, 2008).

### 2.3.3 Neurotransmitters

#### 2.3.3.1 Serotonin

PMS has been associated with a reduced neurotransmission of serotonin. Decreased levels of serotonin have been associated with depression, mood swings, irritability, self-deprecation, poor impulse control, sleep disturbance, anxiety, aggression, decreased pain threshold, carbohydrate cravings as well as a difficulty concentrating. There is evidence that shows CNS serotonergic functioning is changed during the luteal phase in women with PMS (Rapkin, 2003). It has also been proposed that serotonin 'deficiency' in women with PMS enhances sensitivity to progesterone (Indusekhar, 2007).

#### 2.3.3.2 Gamma amino butyric acid (GABA)

The GABA transmission system is the chief inhibitory system that is found in the CNS. Studies have shown that there are decreased levels of GABA in plasma as well as in the cerebrospinal fluid of those that have mood disorders. GABA plasma levels are also reduced in females that suffer with premenstrual dysphoric disorder (PMDD), a severe form of PMS, during the late luteal phase in comparison to normal females whose GABA plasma levels increase from the mid-follicular until the late luteal phase (Indusekhar, 2007).

### 2.3.4 Diet and Lifestyle factors

Certain dietary changes are often suggested to help lessen the symptoms of PMS. The most common dietary recommendations are to restrict sugar, reduce salt intake and increase consumption of complex carbohydrates. Complex carbohydrates have been shown to have a

positive effect on mood and cognition. Foods that are rich in fiber may be helpful in restoring healthy oestrogen levels (El-Hamid *et al.*, 2013). However there is not enough research to support the above statements (Salamat *et al.*, 2007).

A deficiency in essential fatty acids may lead to irregularities in prostaglandin (lipid compound) synthesis. A deficiency in  $\gamma$ -linoleic acid which is a lipid that is important in the inflammatory process may contribute to PMS symptoms (Salamat *et al.*, 2007). Risk factors for PMS include: obesity, insulin resistance, calcium deficiency and Vitamin D3 deficiency (Milewicz and Jedrzejuk, 2006). Calcium supplementation has been shown to reduce many symptoms of PMS by as much as 30%, therefore calcium deficiency may contribute to PMS (Balch and Balch, 2003).

## **2.4 Epidemiology of PMS**

Epidemiological surveys have estimated that because of the different measurement tools or diagnostic criteria that have been used previously to assess PMS, up to 75% of women who are of a reproductive age experience symptoms of PMS (Kleinstaubner *et al.*, 2012). Studies conducted showed that the prevalence of moderate PMS ranges from 13.4% to 34.1%. Currently, it is cited that about 3–9% of women report having a severe type of PMS which is identified as PMDD this is sufficient for females to seek treatment (Wang *et al.*, 2012).

## **2.5 Diagnosis of PMS**

The American College of Obstetricians and Gynaecologists (ACOG) published diagnostic guidelines in the year 2000 (there are no updated versions available) for PMS. The ACOG diagnostic criteria requires at least:

- One physical symptom (breast tenderness, breast swelling, abdominal bloating, headaches, swelling of extremities or food cravings)
- One mental symptom (irritability, depression or anxiety)
- Should occur five days before menses
- In each of the three prior cycles, and
- An amelioration of the above symptoms within four days of the onset of menses.
- These symptoms should not return until at least day thirteen of the cycle and
- Should also be associated with an impairment or dysfunction in social or economic performance (Halbreich, 2004).



There are no objective tests for the diagnosis of PMS, however using a PMS diary helps to determine if there is a symptom-free period after menstruation, as well as to exclude another cause or illness (Edmonds, 2012). For clinical purposes, a PMS chart is suitable to recognise and track symptoms and their timing. Symptoms should be confirmed by doing a daily rating for at least two consecutive cycles (Indusekhar *et al.*, 2007).

### **2.5.1 Differential diagnosis of PMS**

The differential diagnosis of PMS can be divided into medical and psychiatric disorders. Medical disorders include: premenstrual dysphoric disorder, dysmenorrhea, hypothyroidism, autoimmune disorders, seizure disorders and endometriosis. Psychiatric disorders include: major depression, dysthymia, generalised anxiety, panic and bipolar illness (Freeman; 2003).

### **2.6 The impact of PMS on the Quality of Life (QOL)**

One study conducted on the frequency and impact of PMS, on the QOL of women of reproductive age by Brohi *et al.* (2011) showed that a very high frequency (81.25%) of women suffered with PMS and it had an impact on their QOL.

A study was conducted at a University in Egypt on the knowledge and practice of female employees and the effects of PMS on their daily activities. It was found that PMS was associated with difficulty concentrating at work, decreased work production, increased work absence and being late for work (El-Hamid *et al.*, 2013).

Another study conducted in Tehran on the effect of PMS on the QOL in adolescent girls found that PMS affected the girls by reducing their quality of mental health and vitality (Taghizadeh *et al.*, 2008).

### **2.7 Conventional treatment for PMS**

Conventional treatment can be categorised in four ways: hormonal, psychotherapeutic, diuretics and surgical (Oats and Abrahams, 2012). However these conventional treatments have a limited efficacy and many side effects (Zaka and Mahmood, 2012).



### 2.7.1 Hormonal Treatment

Hormonal treatment for PMS includes ovarian cycle suppression using oestrogen, progesterone and progestogen, and combined oral contraceptive pills (COCPs) synthetic steroid ethisterone (Danazol), gonadotropin releasing hormone analogues (GnRHa), and bromocriptine.

#### 2.7.1.1 Oestrogen

There is proof that the suppression of ovarian function using oestrogen removes PMS (Usman *et al.*, 2008). Oestrogen can be administered in different forms such as the oral contraceptive pill (OCP), conventional cyclical or continuous hormone replacement therapy (HRT), and oestradiol patches or implants. Women that are receiving unopposed oestrogen will require progestogen locally in the form of levonorgestrel releasing intrauterine systems in order to protect the uterus from the untoward side-effects of unopposed oestrogen: depression, tiredness, bloating and increased risk of uterine cancer. This reduces systemic absorption of oestrogen and prevents the re-introduction of premenstrual symptoms (Elovainio *et al.*, 2007).

#### 2.7.1.2 Combined OCP

The combined OCP (COCP) works by suppressing ovulation by inhibiting the secretion of GnRH through the combined activity of both the oestrogen and progesterone components of the hypothalamic-pituitary ovarian axis. COCP causes a new progesterone cycle to be introduced. Trials have shown conflicting results. While some trials have shown that the COCP was ineffective in the treatment of PMS, other trials have shown that while the COCP lessened the physical symptoms of PMS, they do not improve mental symptoms. It must also be noted that the adverse effect of COCP includes negative mood symptoms similar to that of females that suffer with PMS (Halbreich *et al.*, 2006).

#### 2.7.1.3 Progesterone and progestogen

Progesterone (natural progesterone) and progestogen (synthetic progesterone) can be administered in the form of pessaries, injections, vaginal gel, or orally using the micronised form. The use of progesterone in the management of PMS has been done on an unsubstantiated basis that progesterone deficiency is the cause of PMS symptoms. Progestogens such as dydrogesterone and norethisterone have been shown to be clinically ineffective in randomised control trials (RCTs) conducted on participants with PMS; and were shown to cause PMS when given as part of HRT. The side effects of progesterone or progestogen depend on how they are

administered, however side effects include abdominal pain, nausea, headache, dizziness and dysmenorrhea (Salamat *et al.*, 2007).

#### 2.7.1.4 Synthetic steroid ethisterone (Danazol)

Danazol is a synthetic steroid male hormone (androgen derivative) that works by preventing ovulation and stops ovarian function. If it is given during the luteal phase of the menstrual cycle it has been shown to be ineffective for most symptoms of PMS (Rosolowich *et al.*, 2006). The side effects of the Danazol include mood swings, nausea, dizziness, rashes, headaches, masculinization and mastalgia which occurs cyclically (Glenville, 2002). Danazol is seldom used now, but if it is, small doses are advised, and careful counseling should be given regarding contraception, because danazol can cause virilisation of a developing female fetus (Nevatte *et al.*, 2013).

#### 2.7.1.5 Gonadotropin releasing hormone (GnRH) analogues agonists

GnRH agonists work by suppressing ovarian function and are extremely effective in the treatment of PMS. GnRH agonist analogues appear to offer a significantly higher therapeutic effect compared to progesterone and progestogen however it induces 'menopausal' side effects and possible complications from long term use such as osteoporosis and an increased risk of cardiovascular disease (Wyatt *et al.*, 2004), other side effects include hot flushes, vaginal dryness, occasional depression, headaches and muscle aches (Rapkin, 2003).

#### 2.7.1.6 Bromocriptine

Bromocriptine is a dopamine agonist. It has the ability to decrease the levels of prolactin. Bromocriptine has been shown to be effective in the treatment of premenstrual mastalgia. Some studies have also shown that bromocriptine improves symptoms such as swelling, bloating, weight gain, depression, insomnia, anxiety and irritability; however, this has not been shown consistently across studies (Usman *et al.*, 2008).

### 2.7.2 Psychotherapeutic treatment

The psychotherapeutic treatment of PMS mainly relies on the use of anti-depressants and anxiolytic drugs.

#### 2.7.2.1. Anti-depressants

Psychotherapeutic treatment includes serotonergic and non-serotonergic antidepressants. Serotonergic antidepressants are known as Selective serotonin reuptake inhibitors (SSRIs). SSRIs prevent the brain from re-absorbing serotonin and are beneficial in the treatment of

anxiety and depression associated with PMS (Steiner *et al.*, 2006). Adverse side effects of SSRIs include gastrointestinal symptoms such as anorexia, nausea, weight loss; nervousness; insomnia and sexual dysfunction (Salamat *et al.*, 2007).

Non-serotonergic antidepressants are less effective than SSRIs and no more effective than placebo in the treatment of PMS (Nevatte *et al.*, 2013). Adverse side effect of non-serotonergic antidepressants include gastrointestinal bleeding, colitis, headaches, dizziness, nervousness, hypersensitivity skin reactions, tinnitus, edema, depression, drowsiness, insomnia and impaired renal function (Snyman, 2007).

#### 2.7.2.2 Anxiolytics

Anxiolytics act on the central nervous system and can be therefore potentially used for premenstrual insomnia, anxiety/tension and irritability. However treatment with anxiolytics should be monitored carefully especially in individuals who have a history of substance abuse, because not enough research has been done on anxiolytics for PMS due to a risk of drug dependence (Nevatte *et al.*, 2013).

#### 2.7.3 Diuretics

Diuretics are aldosterone receptor antagonists. Diuretics such as Spironolactone are steroid drugs which treat certain types of edema by promoting the excretion of sodium. In women who experience premenstrual water retention, a small dose of 25–50 mg/d of Spironolactone has produced positive effects on breast tenderness and bloating (Salamat *et al.*, 2007). A study done showed that taking 100mg of Spironolactone daily from day five until day twenty five of the menstrual cycle did not show any improvement of either the physical and psychological symptoms compared to placebo (Halbreich *et al.*, 2006). Some of the adverse effects of Spironolactone include gastrointestinal disturbance and menstrual irregularities, which may be substantial enough for a patient to stop the treatment (Salamat *et al.*, 2007).

#### 2.7.4 Surgery

A bilateral oophorectomy or a total hysterectomy are extreme treatment options for PMS and is not recommended (Oats and Abrahams, 2012) as it is invasive and seldom justified, however it may be used in extreme circumstances (Usman *et al.*, 2008). This procedure will cause premature menopause and PMS symptoms will be replaced with menopausal symptoms (Glenville, 2002).

## **2.8 Complementary treatment for PMS**

Complementary treatments for PMS include diet and exercise, nutritional supplements, phytotherapy, cognitive behavioural therapy, traditional Chinese medicine, reflexology and homeopathy.

### **2.8.1 Diet and exercise**

RCTs show that increasing the amount of complex carbohydrates during the luteal phase of the menstrual cycle decreases the severity of PMS, especially the mood symptoms. Reducing caffeine, salt, refined sugars and alcohol may help reduce PMS; however no trials have been conducted (Bahamondes *et al.*, 2007).

Premenstrual symptoms have been shown to be less in females who do sporting activities regularly. A study was conducted on females who lead a sedentary lifestyle who were then introduced to exercise and were monitored prospectively for 6 months. Results showed an improvement in mood symptoms, fluid retention and breast tenderness associated with PMS (Salamat *et al.*, 2007). A large survey on 1,800 females found that exercise was used by more than half of the women as a self-help measure, where over 80% found it helpful for alleviating PMS symptoms (Girman *et al.*, 2003). Aerobic exercise was found to improve symptoms of PMS; however this was only in one small randomised trial (Bahamondes *et al.*, 2007).

### **2.8.2 Nutritional supplements**

#### **2.8.2.1 Calcium and Vitamin D**

Calcium is the dietary supplement with the strongest empirical support of alleviating premenstrual symptoms (Whelan *et al.* 2009). Calcium supplementation has been shown to decrease premenstrual symptoms by as much as 30% (Balch and Balch, 2003; Bendich, 2013). A study showed that supplementing 1200 mg of calcium daily decreased the total symptom score of PMS by 48% compared to 30% in the placebo group (Canning *et al.*, 2010). Some studies have shown that blood calcium and vitamin D levels are lower in women with PMS (Panay, 2011). Increasing the levels of calcium during menstruation is theorised to control calcium homeostasis before ovulation. However more trials need to be conducted (Nevatte *et al.*, 2013; Panay, 2011).

#### 2.8.2.2 Vitamin B6 (pyridoxine)

Vitamin B6 is important for amino acid and fatty acid metabolism. It is important for normal nerve functioning and for the formation of red blood cells (Beers *et al.*, 2003). It also plays a role in synthesising certain neurotransmitters which control behavior and mood such as depression (Glenville, 2002). A systemic review of studies suggested that a dose of 100 mg daily of vitamin B6 could be beneficial for the symptoms of PMS including depression, however conclusions are limited. A dosage of more than 100 mg of vitamin B6 daily has been associated with neurotoxicity (Colledge *et al.*, 2010).

#### 2.8.2.3 Vitamin E

A study was done to evaluate the effects of vitamin E supplementation in women with PMS; participants received 400 IU/day of vitamin E or placebo for three menstrual cycles. Significant improvements in certain emotional and physical symptoms were observed in the vitamin E group and there was no effect seen in the placebo group. More studies need to be conducted to determine the efficacy of vitamin E (Bendich, 2013). Adverse effects of Vitamin E (more than 1200 I/U per day) include flatulence, nausea, heart palpitations and diarrhea (Integrative Medicine, 2000). Vitamin E should also be taken with caution in patients taking anticoagulant medication, or who have diabetes, rheumatic heart disease, hyperthyroidism or high blood pressure (Balch and Balch, 2003).

#### 2.8.2.4 Magnesium

Magnesium supplementation has been shown to help with symptoms of PMS such as, premenstrual migraine headaches and dysmenorrhea. Females that suffer with PMS have been shown to have low red blood cell magnesium levels compared to females without PMS (Rosenstein *et al.*, 1994). Taking 200-400 mg of magnesium daily has been shown to be effective in the treatment of PMS (Bahamondes *et al.*, 2007), specifically for fluid retention and mood. A pilot study done on the efficacy and safety of 250 mg modified-release magnesium was effective in decreasing premenstrual symptoms in women with PMS (Quaranta *et al.*, 2007). A possible side effect of doses greater than 10 mg per kg per day (e.g. 700 mg Magnesium in a 70 kg person) is osmotic diarrhea (Bendich, 2013).

#### 2.8.2.5 Essential fatty acids (EFAs)

A deficiency in the metabolism of fatty acids has been found in females suffering with PMS. Evening primrose oil contains the fatty acids linoleic acid and gamma linoleic acid. A randomised controlled study showed efficacy for an EFA preparation that contained linoleic

acid, gamma-linoleic acid, oleic acid and vitamin E in improving premenstrual symptoms compared to the placebo (Rocha Filho *et al.*, 2011). However previous studies on evening primrose oil for the treatment of PMS did not show it to be superior to placebo (Campagne and Campagne, 2007).

### 2.8.3 Phytotherapy

#### 2.8.3.1 *Vitex agnus castus* (Chaste berry/Chaste tree)

*Vitex agnus castus* works by inhibiting the secretion of prolactin. *Vitex agnus castus* has been shown to decrease symptoms such as irritability, depression, anxiety, rage, headache, desire for sweets and breast swelling associated with PMS by 50% and more (Berger *et al.* 2000; Loch *et al.* 2000; Schellenburg, 2000). Studies comparing fluoxetine and vitamin B6 with *Vitex agnus castus* in decreasing premenstrual symptoms showed no significant difference (Atmaca *et al.*, 2003; Zamanil *et al.*, 2012). Adverse effects of *Vitex agnus castus* mainly affect the gastrointestinal tract, skin, and the integumentary system (Loch *et al.*, 2000). *Vitex agnus castus* is not safe to use during pregnancy (Bendich, 2013).

#### 2.8.3.2 *Hypericum perforatum* (St. John's wort)

*Hypericum perforatum* has been proven to be effective in the treatment of mild to moderate depression in some studies (Canning *et al.*, 2010; Clement *et al.*, 2006). However according to one study, *Hypericum perforatum* did not reduce premenstrual depression compared to placebo (Hicks *et al.*, 2004). Adverse effects of *Hypericum perforatum* include abdominal pain, constipation, bloating, nausea, vomiting, dizziness, dry mouth, itching, hives, skin rashes, sleep problems, unusual tiredness, photosensitivity and elevated blood pressure (Integrative medicine, 2000).

#### 2.8.3.3 *Matricaria chamomila* (Chamomile)

A clinical randomised double blinded study was conducted to compare the effects of 100 mg *Matricaria chamomila* to a non-steroidal anti-inflammatory drug (NSAID) in women with PMS. There was a decrease in emotional symptoms among *Matricaria chamomila* users in comparison to NSAID's after two cycles. However the physical symptoms were not significantly different among either group. *Matricaria chamomila* seems to be more effective than NSAIDs in relieving the intensity of premenstrual related psychological pains; however more studies need to be done to confirm the efficacy of Chamomile extract (Sharifi *et al.*, 2014).

#### 2.8.3.4 *Dioscorea villosa* (Wild yam)

Wild yam root contains diosgenin, which is a substance that is used in laboratory synthesis of steroid hormones. The use of Wild yam in the treatment of PMS is based on the reasoning that diosgenin will be converted into progesterone in the body, and this may relieve premenstrual symptoms. However, the conversion of diosgenin to progesterone has been proven only *in vitro* and not in the human body. The effect of wild yam root in women with PMS is not known (Bendich, 2013).

#### 2.8.3.5 *Ginkgo biloba* (Ginkgo)

*Ginkgo biloba* extract contains active compounds including flavonoids and terpenoids. Terpenoids have antioxidant and scavenging properties. *Ginkgo biloba* inhibits platelet-activating factor has anti-inflammatory effects and also relaxes vascular smooth muscles. A study done on *Ginkgo biloba* showed a statistically significant improvement in all the premenstrual symptoms, especially breast tenderness and fluid retention (Ozgoli *et al.*, 2009). However *Ginkgo biloba* works by inhibiting platelet-activating factor; and could increase chances of bleeding in some people (Ozgoli *et al.*, 2009; Girman *et al.*, 2003).

### 2.8.4 Cognitive Behavioural Therapy (CBT)

CBT for PMS involves adaptive ways of coping with PMS. CBT is used in the treatment of mild to moderate PMS with no adverse effects. Studies have shown that CBT decreases anxiety, depression, negative thoughts and physical symptoms but it may be expensive (Bahamondes *et al.*, 2007).

In another study conducted by Hunter *et al.* (2002) it was shown that CBT was as effective as fluoxetine (SSRI) in the treatment of anxiety associated with PMS. More controlled studies need to be conducted to support the efficacy of CBT (Campagne and Campagne, 2007).

### 2.8.5 Reflexology

Reflexology uses manual pressure on certain reflex points such as the ears, hands, and feet, that somatotopically correspond to specific areas of the body. A randomised controlled study evaluated the effect of reflexology therapy on the symptoms of PMS. Women that received true reflexology showed a considerable decrease in PMS symptoms compared to placebo reflexology (Girman *et al.*, 2003).



## **2.8.6 Traditional Chinese Medicine (TCM) and Acupuncture**

Traditional Chinese medicine (TCM) targets both psychological and physical symptoms. Dong quai (*Angelica Sinensis*) is a TCM herb that is frequently called ‘female ginseng’. It encourages normal hormonal balance and is also used for cramping and pain associated with PMS (Laister, 2008). Dong quai also acts as a mild sedative, laxative, diuretic, antispasmodic and therefore a pain reliever. It also assists the body to use hormones (Balch and Balch, 2003). TCM is effective when used in conjunction with other therapies, however further research is required in its treatment of PMS (Chou and Morse, 2005).

Studies conducted comparing acupuncture to TCM and hand acupuncture therapy with hand moxibustion showed that there was an improvement of the primary symptoms of PMS (Fang *et al.*, 2008; Shin *et al.*, 2009; Xu and Sun, 2006). Acupuncture is generally regarded as being safe. Potential side effects of acupuncture include pain caused by needling, hematoma formation, bleeding, orthostatic problems, pneumothorax, spinal lesion and infection (Cho and Kim, 2010).

## **2.9 Homeopathy**

### **2.9.1 Definition of Homeopathy**

The word Homeopathy is derived from the Greek word “homoios” meaning “like” and “pathos” meaning “suffering” (Downey, 1997). Homeopathy treats patients on a mental, emotional as well as a physical level using remedies that are ultra-diluted and potentised (succussed) in order to stimulate the body’s own defense system to initiate healing (De Schepper, 2010).

### **2.9.2 Vital force**

The vital force is the dynamic energy complex that animates within the living organism. It is linked to the defense mechanism, particular the immune system (Vithoukcas, 2010). If homeostasis within the living organism is disturbed through disease or unusual physiological stress the vital force initiates a response by making the organism aware of the diseased state and tries to restore homeostasis (Jayasuriya, 2005). If homeostasis is unable to be restored it leads to a deterioration of an individual’s health (Vithoukcas, 2002).

### **2.9.3 Proving’s**

In order to gain knowledge and understanding about remedies, Hahnemann, the founder of homeopathy began testing substances in low and frequent doses on healthy individuals. These individuals were required to note down any of their symptoms. This was done in order to gather more information about the drugs including their action and toxicology (Carlston, 2003; Sherr, 1994). This is called a proving or pathogenesis and is written in the language of the individual



proving the remedy. The collections of proving's are recorded in the homeopathic Materia Medica (Eizayaga, 1991). The symptom picture of a patient is closely matched to the best suited homeopathic remedy (found in the Materia Medica) to bring about cure (Vithoulkas, 2002).

#### **2.9.4 Miasms**

Hahnemann, who was the founder of homeopathy, noticed that after successful treatment of patients they would continuously relapse. He realized that this was due to an underlying ingrained taint that was present within the vital force. This underlying taint was brought about by factors such as medical mismanagement or infective agents that predisposed patients to chronic diseases. This he termed as “miasms” (Eizayaga, 1991).

#### **2.9.5 Simillimum prescribing**

##### **2.9.5.1. Homeopathic simillimum**

The homeopathic simillimum refers to the unique, fundamental homeopathic remedy that covers the totality of symptoms experienced by the individual being treated (De Schepper, 2011).

##### **2.9.5.2. Principles of simillimum prescribing**

Homeopathy is based on a number of important governing laws and principles.

- *The law of similars* - a substance that produces symptoms when given, in crude form, to a healthy individual, has the ability, when given in a homeopathic preparation, to cure similar symptoms in a diseased individual (Richberg, 2004).
- *The law of minimum dose (homeopathic dose)* - a small dose that acts on a patient, has the ability to produce a healing response by strengthening the defence mechanism and to restore balance in the patient using the process of potentisation. Potentisation is serial dilution and succussion that decreases the amount of crude substance in the homoeopathically prepared remedy (Jayasuriya, 2005).
- *The law of single remedy single dose* - Hahnemann stated that there is usually only one remedy that that will cover the actual state of the patient and only the most similar remedy should be given to the patient. If the symptoms of the patient changes then it is also necessary to change the remedy to the new similar remedy (Eizayaga, 1991).
- *Individualisation* - prescribing homeopathic remedies accurately depends on the correct match between the homeopathic remedy (simillimum) and the individual characteristics

of the illness in the patient. This treatment is said to be individualised, where the individual is considered on a mental, physical and emotional level in a holistic way, using the principles of classical homeopathy (Swayne, 1998).

- *Hering's law of cure* – this law was formulated by Constantine Hering. He observed that during the process of healing, symptoms heal from above to below, from inside to the outside, from the most important organs to less important organs, and that the last symptoms that appear begin to disappear and the old symptoms start to reappear (Eizayaga, 1991).

## **2.9.6 Homeopathic case-taking, repertorisation and remedy/potency selection**

### 2.9.6.1 Case taking

Homeopathic case taking involves an in-depth interview to obtain as much information as possible based on the individuality of the patient. The case is then analysed to help find the simillimum (Subramanian and Subramanian, 2004). Everything from the presenting complaint to appetite and general weather/temperature preferences, as well as mental and emotional symptoms is covered with allowances made for differences between acute and chronic cases (Vithoukias, 2002).

### 2.9.6.2 Repertorisation

The Homeopathic repertory originates from the Latin word *Repertorium* which means “place for finding something, table or compendium where the contents are arranged in such a way that they are easy to find” (Sydow, 1997). Finding the simillimum requires that the symptoms must be graded and grouped correctly. This is done by taking symptoms from the patient and comparing them to the symptoms (rubrics) found in the repertory. These remedies are then cautiously evaluated and compared using the *Materia Medica*, and a suitable remedy is selected (Jayasuriya, 2005).

### 2.9.6.3 Remedy/potency selection

Potencies can be divided into three scales namely: *Decimal* scale which is a dilution of 1 in 10 also written as D or X; *Centesimal* scale which is a dilution of 1 in 100 written as C, and the *LM* scale which is 1 in 50 000 (De Schepper, 2010). There are many different viewpoints on the selection of potency and how the dose should be repeated. An example of this is shown in a comparison between the Hahnemannian and Kentian School. The Hahnemannian school prefers

prescribing low potencies (i.e. 6cH and 30cH) taken more frequently compared to the Kentian school which prefers prescribing high potencies (i.e. 200cH and higher) taken as needed (Murphy, 2007). In an acute condition, repetition of a high potency may be given, whereas a chronic condition with a long standing pathology, is usually treated using low potencies. Potency selection and the repetition of the dose of the homeopathic remedy are individually applied to integrate the condition, remedy and the individual patient (De Schepper, 2010).

### **2.9.7 Principles of homeopathic prescribing and management**

Homeopathic case management, and the second and the consequent prescriptions depend on the nature of the condition being treated and the patient's response to the first prescribed remedy.

Different scenarios are explained below with possible management options:

#### **2.9.7.1 Great amelioration of the patients' symptoms without any aggravation**

If there is a great improvement it means that the simillimum has been attained in the remedy as well as the potency. The remedy should not be taken until the symptoms return again. If the symptoms return then the same remedy should be given in the same potency (De Schepper, 2010).

#### **2.9.7.2 No reaction to the remedy (neither an aggravation nor amelioration)**

If the homeopath feels that the correct remedy was given, the individual might be hyposensitive and have a slow reaction in this case; only the potency and repetition of the dose need to be adjusted. The case may also be assessed to check for any external factors (obstacles to cure) that may have interfered with the healing process such as smoking, lack of exercise, stress, environmental pollutants, drug/alcohol abuse dietary indiscretions or irreversible disease pathology. Another reason for no response to a remedy is a miasmatic block which may also be causing no reaction. In that case, an anti-miasmatic remedy should be prescribed. (De Schepper, 2010).

#### **2.9.7.3 Slight amelioration of the patients symptoms followed by the return of the symptoms as they were before.**

It may be the correct remedy, but the potency needs to be increased to maintain a sustained improvement. There might be a miasmatic block and an anti-miasmatic remedy needs to be prescribed. The simillimum was not prescribed, and instead the simile which stimulates the vital force to throw out symptoms leading towards the simillimum. Retake the case to find the simillimum. A review of the case is needed to evaluate obstacles to cure (De Schepper, 2010).

#### 2.9.7.4 Aggravation of the patient's symptoms

A similar aggravation occurs when the patient's main complaint increases in severity or intensity. This means that the incorrect remedy, potency or repetition of the dose was selected. If the similar aggravation symptoms improve quickly and results in cure (according to Herings law of cure) this is called a Herings crisis (Ullman, 1991). If the similar aggravation still continues it means that the patients' vital force was not capable of producing a healing response in which case palliative treatment is needed (De Schepper, 2010).

#### 2.9.7.5 Prolonged aggravation and a slow decline

Even though a well-chosen remedy was given, the case is incurable due to irreversible pathology. The remedy needs to be stopped and palliative treatment is required. Another possibility (although rare) is that the individual is hypersensitive and is overwhelmed by a high potency in which case an antidote is required. If the aggravation is severe the homeopathic remedy will have to be antidoted by using a suitable antidote (De Schepper, 2010).

#### 2.9.7.6 Long-time improvement followed by a sudden aggravation

This means that the individual has started to prove the remedy by showing accessory symptoms in which case the remedy is stopped. The aggravation will disappear and the remedy only needs to be taken when symptoms recur. Accessory symptoms may also develop if the remedy was repeated unnecessarily (De Schepper, 2010).

#### 2.9.7.7 Symptoms are following Herings law of cure

In this case no interference should occur as cure is underway (De Schepper, 2010).

#### 2.9.7.8 New symptoms develop

If new symptoms appear that were contradictory to Herings law of cure or that the individual never experienced before the homeopathic remedy was given, it is called a dissimilar aggravation. This means that the prescription was inaccurate and the patient may need to be given an antidote (De Schepper, 2010; Paschero, 2000).

### **2.10 Homeopathic treatment of PMS: Related Research**

Komar (2005) conducted a similar homeopathic simillimum study across all demographic groups using case studies. It was observed that breast tenderness improved in the first month, premenstrual symptoms of irritability, depression, breast swelling, abdominal bloating and food

cravings improved in the second month, and during the third month anxiety improved. The results showed that the homeopathic simillimum was effective in the treatment of PMS.

Laister (2008) conducted a double-blind placebo-controlled study across all demographic groups using case studies. Results showed statistically significant changes in water retention and appetite changes in the treatment group. The placebo group showed statistically significant changes in concentration, autonomic reaction and appetite changes. The inter-group analysis of both treatment and placebo together failed to reveal any statistical significance. Therefore, results showed that the homeopathic simillimum was not statistically significant in the treatment of PMS.

Mainganye (2011) conducted a homeopathic simillimum study on the efficacy of the homeopathic simillimum in black females with PMS over a period of four months. Results showed that the homeopathic simillimum was effective in decreasing irritability, anxiety, breast tenderness and food cravings in the second and third month, and decreased breast swelling, bloating of the abdomen and headache during the third month.

Patel (2010) conducted a homeopathic simillimum study on the efficacy of the homeopathic simillimum in white females with PMS over a period of four months. Results showed that there was a significant improvement in irritability, breast swelling, breast tenderness, abdominal bloating and food cravings in all three months. Anxiety improved in month one and month three. Premenstrual headache improved in month two and three, and depression in month three respectively.

Yakir *et al.* (2001) conducted a randomised controlled double blinded study to assess the efficacy of homeopathic individualised treatment of PMS. From 90% of the participants, 30% participants experienced an improvement and 37.5% of the participants who received the placebo had a similar improvement. The homeopathic treatment was found to be effective in treatment of PMS compared to placebo.

Danno *et al.* (2013) and a group of French physicians conducted a study on the homeopathic treatment of PMS using case studies over a period of six months on women who had PMS symptoms for more than three months. Results showed that homeopathic treatment was effective in decreasing irritability, aggression, tension, and mastodynia. The quality of life was also improved in the treatment group.

## **CHAPTER THREE**

### **3. METHODOLOGY**

#### **3.1 Research design**

The research design was in the form of descriptive case studies using individualised homeopathic treatment for PMS. The case studies were analysed and described over time.

#### **3.2 Research sample**

Using purposive sampling, ten South African Indian females between 18-40 years of age who experienced PMS symptoms were recruited using advertisements in the form of posters (Appendix A) which were placed with permission granted from those in authority on notice boards on the UJ campuses, health stores and at various homeopathic/medical practices.

Potential participants had to complete a selection questionnaire (Appendix C) and were selected according to the following criteria:

##### **Inclusion criteria**

Participants were included in the study if they:

- Are females between the ages of 18 and 40 years who experienced PMS on a monthly basis;
- Experienced an increase in at least one of the following mental and physical symptoms at least 14 days before their menses began, in each of the three preceding menstrual cycles:
  - Mental symptoms-irritability, depression or anxiety
  - Physical symptoms-breast tenderness or swelling, abdominal bloating, headaches, swelling of extremities or food cravings; and
- Have an amelioration of the above symptoms within three days of the onset of menses and symptoms should have not reoccurred until at least day 13 of their cycle.

##### **Exclusion criteria**

Participants were excluded from the study if they:

- Had irregular menstrual cycles;
- Were lactating females;
- Were pre-diagnosed with anxiety and depression;

- Used sex hormones except the oral contraceptive (must have been used for a minimum of 3 months);
- Had concomitant psychotherapies and/or alternate therapies for PMS; and/or
- Were pregnant.

Participants were asked not to make use of any homeopathic remedies, herbal supplementation, acupuncture or any other treatment for PMS or make any changes to their lifestyle or diet while participating in this study. If participants were using any conventional medication or if there had been any changes in their dosage or brand of oral contraceptive they were requested to document this in the questionnaire.

### **3.3 Research procedure and design**

This was a 12-week study using individualised homeopathic treatment using descriptive case studies. It was conducted at the Homeopathic Health Training Centre on the UJ Doornfontein Campus. During the first consultation the researcher explained the study to the participants who met the criteria based on the selection questionnaire (Appendix C), followed by the signing of the Participant Information and Consent Form (Appendix B). A full case history was taken using a standard homeopathic case taking form (Appendix D). A baseline of each participant's premenstrual symptoms was established by an initial treatment free month.

Participants were required to score their daily symptoms on a PMS chart (Appendix E) every day for 12 weeks. Participants were treated using individualised homeopathic treatment at the follow-up consultations. At week 4-8 before each follow-up consultation participants were reminded of the appointment via email and text message.

During the follow-up consultations (week 4, week 8 and week 12) the PMS charts were collected. The follow-up consultations included case taking (Appendix D) and relevant physical examination. Participant's cases were analysed and repertorised. The simillimum remedy was found with the help of the Mercurius Software (Homeopathic Repertory) (Van Zandvoort, 2009) and standard Materia Medica with the guidance of the supervisor or co-supervisor before being dispensed. Potency selection and the repetition of the dose of the homeopathic remedy were individually applied in accordance with De Schepper's (2011) method of prescribing. The final consultation took place at the end of week 12, the PMS chart was collected and no remedy was given.



### **3.4 Medication administration**

The medication was dispensed, by the Homeopathic Dispenser, to the participant together with an instruction sheet on how to take and store homeopathic remedies (Appendix I). The vehicle in which the homeopathic remedy was dispensed was in pillule form in a number eight vial. The frequency of the administration of the medication depended on the potency selected, and was in accordance with De Schepper's method of prescribing.

### **3.5 Reliability and validity measures**

The medicating potencies were bought from CoMed Health, a registered homeopathic pharmaceutical company that employs good manufacturing practices, and was dispensed by the Homeopathic Dispenser following standard procedures. The PMS chart (Appendix E) is considered a reliable tool and records the participant's symptoms on a daily basis, these symptoms are based on the most characteristic PMS symptoms and has been used in previous PMS studies (Mainganye (2011); Patel (2010); and Komar (2005). The evaluation of the symptoms was subjective and was based on a 5 point scale where 0 - "no symptom", 1- "very mild", 2 - "mild", 3 - "severe", 4 - "extremely severe".

### **3.6 Data collection and analysis**

Data collected from the observational studies and the PMS chart were analysed, where changes in the totality of symptoms were described over time using descriptive and graphical representation.

### **3.7. Ethics**

Participation in this study was entirely voluntary and participants had a choice to withdraw at any stage without consequences. Participants were fully informed about the requirements of this study and the procedures that were followed. Any questions were addressed by the researcher. All participants were required to sign the participant information and consent form (Appendix B) before entering into the study. Participants had the right to privacy, with consultations, taking place in a private setting. Anonymity was maintained by replacing participant's names with case numbers. Participant's personal details were not disclosed and all information collected from participants were under lock and key, and was kept in the safe premises of the strong room, for the next 5 years appropriate measures to ensure confidentiality will be taken as per guidelines of the Homeopathic Health Training Centre. Homeopathy is considered to be a safe method of treatment and no risks were anticipated, however if any occurred, participants were asked to report to the researcher as soon as possible for evaluation in order to be referred to a healthcare



provider if necessary. Participants were allowed access to the results upon request, once the research was completed. Participants who wished to continue with the treatment after completion of the study were referred to a registered homeopath or to the Homeopathy Health Training Centre.



## CHAPTER FOUR

### 4. CASE STUDIES

#### 4.1 Case One

|                |                 |
|----------------|-----------------|
| Age            | 36              |
| Race           | Indian          |
| Occupation     | Admin assistant |
| Residency      | Lenasia         |
| Marital status | Married         |
| Pregnancies    | 2               |

##### 4.1.1 Initial consultation: August 2014

##### **Main complaint: PMS symptoms**

A 36 year old female presented with the following PMS symptoms:

- Irritability (severe) and anger (moderate) that occurred before her menses; everything irritated her. She shouted at her kids and her husband. Her irritability improved once she got her menses.
- Breast tenderness (severe) and her whole breast had a tingling feeling. It was ameliorated if she applied pressure to her breasts.
- Abdominal bloating (moderate) which was aggravated during her menses and if she ate any food that caused flatulence such as lentils.
- Lower back pain (moderate) before her menses from her sacrum and moved to her flanks. It was a dull aching pain and was aggravated if she was standing or bending. It was ameliorated if she placed a hot water bottle or applied Deep Heat ointment.
- Throbbing frontal headache (severe) before her menses. The headaches were aggravated by noise or if she bends her head forward.

##### **Menstrual history**

The participant had menarche at around 12-13 years. She had a regular cycle that lasted 28 days. Her menses lasted for 5 days. Her menstrual flow was a medium flow with red clots. From day 2 her menstrual flow decreased.

## Generals

- **Vital tone:** The participant had lots of energy before her menses, but felt tired on days 1-3 of her menses.
- **Appetite:** When she ate sour food it gave her heartburn. She craved carbohydrates and sweets such as cakes, pasta and chips as well as yoghurt sometimes.
- **Sleep:** The participant slept for about 7 hours however if she woke up to urinate she could not fall asleep again and her sleep was restless.

**Mental / emotional:** She liked order and being organized, she liked planning in general.

**Family and medical history:**

**Personal history:** sinusitis

**Maternal:** Mother - nervous tension; Grandfather - lung cancer

**Paternal:** Father - stroke, hypertension, diabetes mellitus; Grandmother - asthma

**Medication:** Oral contraceptive pill (Yasmin +/- 3 years).

**Physical examination and vital signs**

|                  |                       |
|------------------|-----------------------|
| Blood pressure   | 120/80 mm/Hg          |
| Pulse rate       | 100 beats per minute  |
| Respiratory rate | 14 breaths per minute |
| Temperature      | 36 °C                 |

**Abdominal examination:** No abnormalities detected

**Breast examination:** No abnormalities detected

**Prescription:** No remedy was prescribed during the first month of the study to provide a baseline for the participant's premenstrual symptoms.

**4.1.2 Second consultation:** September 2014

**Main complaint**

The following symptoms previously experienced premenstrual remained the same except for the headache which was aggravated.

- Irritability (severe)
- Anger (moderate)
- Abdominal bloating (moderate)
- Lower back pain (moderate)
- She had a throbbing headache (severity increased) before and during her menses that was worse than the first consultation. The headache was still aggravated by noise or if she bends her head forward.

**Generals**

- **Vital tone:** No changes noted
- **Appetite:** No changes noted
- **Sleep:** No changes noted

**Mental / emotional:** No changes noted

**Menses:** No changes noted

**Physical examination and vital signs**

|                  |                       |
|------------------|-----------------------|
| Blood pressure   | 120/80 mm/Hg          |
| Pulse rate       | 100 beats per minute  |
| Respiratory rate | 14 breaths per minute |
| Temperature      | 36.5 °C               |

**Abdominal examination:** No abnormalities detected

**Breast examination:** No abnormalities detected

## Repertorisation

| Rubric   | Weight | Sep.       | Lyc.       | Bry.         | Tub.         | Puls.      |
|--|--------|------------|------------|--------------|--------------|------------|
| Abdomen, distension, flatulent food, from            | 26     | 1          | 3          | 3            |              | 1          |
| Chest, sensitive, mammae                             | 14     | 1          | 1          | 3            |              | 1          |
| Generalities, food and drinks, sweets, desires       | 5      | 3          | 4          | 3            | 3            | 3          |
| Head, pain, headache, menses, during                 | 7      | 4          | 4          | 4            |              | 3          |
| Head, pain, headache, pulsating, throbbing           | 3      | 4          | 4          | 4            | 3            | 4          |
| Mind, anger, menses, before                          | 26     | 3          |            |              |              |            |
| Mind, conscientious about trifles                    | 9      | 4          | 4          | 1            | 1            | 4          |
| Mind, irritability, menses, before                   | 13     | 3          | 3          |              |              | 3          |
| Mind, shrieking, screaming, shouting, menses, before | 29     | 3          |            |              | 4            |            |
| <b>Value</b>   |        | <b>243</b> | <b>164</b> | <b>133.6</b> | <b>126.1</b> | <b>126</b> |
| <b>Percentage</b>                                    |        | <b>100</b> | <b>67</b>  | <b>55</b>    | <b>52</b>    | <b>52</b>  |

### Motivation for selection of the remedy

*Sepia officinalis* scored the highest in the repertorisation when the above rubrics were used. It is one of the key remedies used for PMS. The participant's state of mind was the fundamental reason for prescribing *Sepia officinalis*. The *Sepia officinalis* patient is easily irritable and indifferent to her loved ones as experienced by this participant (Mathur, 2001). *Sepia officinalis* has a longing for sour foods, sweet foods and suffer from acidity and dyspepsia like this participant. Other symptoms that matched *Sepia officinalis* include: aching pains in there lumbar region that are ameliorated by pressure and aggravated by stooping (Phatak, 2005) and headaches that are worse for moving or stooping and are aggravated by noise (Vermeulen., 2011).

**Prescription:** *Sepia officinalis* 6 cH, twice daily.

**Prescribing Clinician:** Dr Debbie Bredenkamp

**4.1.3 Third consultation:** October 2014

### Main complaint

The following symptoms previously experienced premenstrually ameliorated, including the headache.

- Irritability (none) and anger (mild) improved dramatically
- She never got irritated with her kids
- Abdominal bloating (none)
- Lower back pain (none)
- Breast tenderness (mild)
- She had a headache (mild) that only occurred on the last day of her menses

### Generals

- **Vital tone:** She felt her energy levels improved
- **Appetite:** Her food cravings stayed the same; however she noticed that her appetite increased this month
- **Sleep:** Her sleep remained the same

**Mental / emotional:** No changes noted

**Menses:** No changes noted

### Physical examination and vital signs

|                  |                       |
|------------------|-----------------------|
| Blood pressure   | 120/85 mm/Hg          |
| Pulse rate       | 105 beats per minute  |
| Respiratory rate | 18 breaths per minute |
| Temperature      | 36.7 °C               |

**Abdominal examination:** No abnormalities detected

**Breast examination:** No abnormalities detected

**Prescription:** *Sepia officinalis* 6 cH, twice daily

Prescribing clinician: Dr Debbie Bredenkamp

The participants main complaint as well as generals had improved therefore the remedy was repeated.

#### 4.1.4 Fourth consultation: November 2014

The following symptoms previously experienced premenstrual were no longer present except for the headache and irritability.

## Main complaint

- Irritability (mild)
- Breast tenderness (none)
- Abdominal bloating (none)
- Lower back pain (none)
- Headache (mild)

## Generals

- **Vital tone:** Her energy levels improved
- **Appetite:** The participant had food cravings for sweets and carbohydrates but it was less than the previous months
- **Sleep:** Improved, she no longer felt restless

**Mental / emotional:** No changes noted

**Menses:** No changes noted

## Physical examination and vital signs

|                  |                       |
|------------------|-----------------------|
| Blood pressure   | 125/80 mm/Hg          |
| Pulse rate       | 100 beats per minute  |
| Respiratory rate | 15 breaths per minute |
| Temperature      | 36.2 (°C)             |

**Abdominal examination:** No abnormalities detected

**Breast examination:** No abnormalities detected

**Prescription:** No remedy was prescribed at this consultation

## 4.2 Case Two

|                |              |
|----------------|--------------|
| Age            | 30           |
| Race           | Indian       |
| Occupation     | Educator     |
| Residency      | Johannesburg |
| Marital status | Single       |
| Pregnancies    | 0            |

### 4.2.1 Initial consultation: August 2014

#### Main complaint: PMS symptoms

A 30 year old female presented with the following PMS symptoms:

- Abdominal bloating (moderate) a few days before her menses.
- Abdominal spams (severe) in her lower left and right quadrants before her menses as well as on day 1 and 2. It was a sharp nagging cramping pain that was ameliorated by placing a hot water bottle on the area, bending her knees towards stomach or taking medication such as Myprodol® capsules. The pain was aggravated if she was lying flat.
- Nausea (moderate) that occurred before her menses. No modalities were noticed.
- Breast tenderness (moderate) which was aggravated by touch.
- Lower back pain (severe) which was aggravated while she was standing or exercising and was ameliorated if she placed a hot water bottle, applied pressure to the painful area or rested.
- Irritability (moderate), she argued with the people around her if they irritated her. She preferred spending time on her own when she had her menses.

#### Menstrual history

The participant had menarche at around 12-13 years; her cycle was a regular 30 day cycle. Her menses lasted for 8 days. Her menstrual flow was heavy from day 1-3 and became lighter as the days progressed.

#### Generals

- **Vital tone:** The participant felt tired and weak around 3pm during her menses. Her energy levels were improved in the evenings or if she exercised.



- **Vital temperature:** Generally the participant felt cold all over her body.
- **Appetite:** She had a small appetite and was thirstless. She craved coca cola and stimulants such as coffee and sweets. She had an aversion to lamb and vegetables.

### Systems review

- **Nose:** She got sinus headaches that were associated with post-nasal drip. She had nasal congestion which was aggravated in the morning and ameliorated if she rubbed her nose or used her nasal spray (Evamist).
- **Eyes:** Her eyes were itchy and were aggravated during season changes. It was ameliorated if she rubbed her eyes.
- **Skin:** The participant's skin felt very dry especially in winter and was only ameliorated if she applied extra thick cream.

**Mental / emotional:** She was generally a calm person and was not easily angered. She was not easily stressed and got along with people, however if she was around someone for too long, she felt she needed her space. She felt disappointed that she might not find someone to spend her life with which made her sad and cry. If she cried she preferred being on her own.

### Family and medical history:

**Personal history:** Hypotension

**Maternal:** Mother - tinnitus, hypotension; Grandmother - stroke, diabetes mellitus; Grandfather - Parkinson's, pneumonia

**Paternal:** Father - spondylitis; Grandmother - asthma, arthritis, and diabetes mellitus

### Observation and Vital signs

|                  |                       |
|------------------|-----------------------|
| Blood pressure   | 110/75 mm/Hg          |
| Pulse rate       | 100 beats per minute  |
| Respiratory rate | 12 breaths per minute |
| Temperature      | 35.5 °C               |

**Abdominal exam:** Nothing abnormal detected

**Breast exam:** Right breast, Skin tag on the nipple (always had it), no discharges or pain.

**Prescription:** No remedy was prescribed during the first month of the study to provide a control of the participant's premenstrual symptoms.

#### 4.2.2 Second consultation: September 2014

##### Main complaint

The following symptoms previously experienced premenstrual remained the same, except for the participant's irritability which was aggravated and her abdominal bloating ameliorated.

- Her abdominal bloating (mild) only lasted 2 days
- Abdominal spasm (severe)
- Nausea (moderate)
- Breast tenderness (moderate)
- Lower back pain (severe)
- The participant's irritability (severe) had increased this month. She felt irritated at work, every small thing irritated her and she preferred being at home on her own

##### Generals

- **Vital tone:** The participant's energy levels were very good, she only got tired in the afternoon and felt she needed a break or needed to relax.
- **Vital temperature:** no changes noted
- **Appetite:** no changes noted

##### Physical examination and vital signs

|                  |                       |
|------------------|-----------------------|
| Blood pressure   | 100/75 mm/Hg          |
| Pulse rate       | 100 beats per minute  |
| Respiratory rate | 14 breaths per minute |
| Temperature      | 35.7 °C               |

**Abdominal exam:** Nothing abnormal detected

**Breast exam:** Right breast, skin tag no changes to colour, shape, size

## Repertorisation

| Rubric   | Weight | Nat-       |            |            |            |            |
|--|--------|------------|------------|------------|------------|------------|
|  |        | m.         | Ign.       | Puls.      | Caust.     | Hyos.      |
| Abdomen, pain, cramping, gripping, menses, before        | 15     | 3          | 3          | 3          | 3          | 3          |
| Extremities, pain, exertion, exercise, agg.              | 13     | 3          | 3          |            | 3          |            |
| Generalities, cold, agg.                                 | 2      | 4          | 4          | 4          | 4          | 4          |
| Generalities, food and drinks, vegetables, aversion      | 13     | 3          | 3          | 1          | 3          | 1          |
| Generalities, weakness, menses, during                   | 9      | 3          | 4          | 4          | 4          |            |
| Mind, love, disappointment, unhappy, ailments from, agg. | 12     | 4          | 4          | 3          | 3          | 4          |
| Mind, quiet, disposition                                 | 8      | 3          | 3          | 4          | 3          | 3          |
| Stomach, nausea, menses, before                          | 20     | 3          | 1          | 3          |            | 3          |
| Stomach, thirstlessness                                  | 4      | 3          | 4          | 4          | 3          | 2          |
| <b>Value</b>   |        | <b>206</b> | <b>202</b> | <b>176</b> | <b>163</b> | <b>159</b> |
| <b>Percentage</b>  |        | <b>100</b> | <b>98</b>  | <b>86</b>  | <b>79</b>  | <b>77</b>  |

### Motivation for the selection of remedy

*Natrium muriaticum* is usually worse for consolation and prefers being alone even when they cry as seen in this participant. Symptoms of the participant that matched *Natrium muriaticum* include: chronic congestive headaches, aching bearing down pains on their backs which are ameliorated by lying flat on their back. *Natrium muriaticum* feels sleepy in the afternoon as observed in this participant (Vermeulen, 2011). *Natrium muriaticum* suffers from weakness and weariness and has a tendency to coldness as described by the participant (Phatak, 2005). *Natrium muriaticum* has dryness of the mucous membranes the participant's skin was very dry and improved once *Natrium muriaticum* was prescribed (Nash, 2001).

**Prescription:** *Natrium muriaticum*, 6 cH, twice daily.

**Prescribing clinician:** Dr Debbie Bredenkamp

#### 4.2.3 Third consultation: October 2014

##### Main complaint

The abdominal bloating previously experienced premenstrual remained the same. Abdominal spasms ameliorated and the rest of the symptoms were no longer present.

- Abdominal bloating ( no changes noted )
- Abdominal spasms (moderate) on day 1 of her menses
- Nausea (none)
- Breast tenderness (none) had improved tremendously.
- Back pain (none)
- Irritability (none)

##### Generals

- **Vital tone:** The participant's energy levels were very high
- **Vital temperature:** No changes noted
- **Appetite:** No changes noted

**Mental/ emotional:** No changes noted

**Menses:** No changes noted

##### Systems review

- **Nose:** No changes noted
- **Eyes:** No changes noted
- **Skin:** It was no longer dry, improved

##### Physical examination and vital signs

|                  |                       |
|------------------|-----------------------|
| Blood pressure   | 100/75 mm/Hg          |
| Pulse rate       | 90 beats per minute   |
| Respiratory rate | 13 breaths per minute |
| Temperature      | 36.5 °C               |

**Abdominal exam:** Nothing abnormal detected

**Breast exam:** No changes noted

**Prescription:** *Natrium muriaticum*, 6 cH, twice daily.

**Prescribing clinician:** Dr Debbie Bredenkamp

The participants main complaints, energy level and skin had improved therefore the remedy was repeated.

#### 4.2.4 Fourth consultation: November 2014

##### Main complaint

The following symptoms previously experienced premenstrual were no longer present except for breast tenderness which was aggravated.

- Her abdominal bloating (none)
- Abdominal spasm (none)
- Nausea (none)
- Breast tenderness (severe) which started a week before her menses; it was aggravated by pressure and nothing ameliorated her symptoms
- Lower back pain (none)
- Irritability (none)

##### Generals

- **Vital tone:** The participant's energy levels were very high
- **Vital temperature:** No changes noted
- **Appetite:** No changes noted

**System review:** No changes noted

**Mental/ emotional:** No changes noted

**Menses:** No changes noted

**Physical examination and vital signs**

|                  |                        |
|------------------|------------------------|
| Blood pressure   | 100/75 mm/Hg           |
| Pulse rate       | 100 breaths per minute |
| Respiratory rate | 15 beats per minute    |
| Temperature      | 36.6 °C                |

**Abdominal examination:** No abnormalities detected

**Breast examination:** No changes noted

**Prescription:** No remedy was prescribed at this consultation



### 4.3 Case three

|                |            |
|----------------|------------|
| Age            | 20         |
| Race           | Indian     |
| Occupation     | Unemployed |
| Residency      | Mayfair    |
| Marital status | Single     |
| Pregnancies    | 0          |

#### 4.3.1 Initial consultation: September 2014

##### Main complaint: PMS symptoms

A 20 year old female presented with the following PMS symptoms:

- Irritability (moderate) that was aggravated when things were untidy or dirty. Her irritability improved if she tidied up the place.
- Abdominal pain (mild) that was infrequent. It was aggravated by bad odours and ameliorated if she drank lemon water or smelt a bar of soap. The pain also decreased if she pulled her knees towards abdomen and applied pressure.
- Lower back pain (moderate) which she described as sore. The pain got worse once her menses started. Lifting heavy objects aggravated the pain and she felt better if she applied heat to the affected area.

**Menstrual history:** The participant had menarche at around 14-15 years; she had a regular 28 day cycle. Her menses lasted 6-7 days. Her menstrual flow was a medium flow.

##### Generals

- **Vital tone:** The participant was very energetic however if she had abdominal pain she would sleep. This only happened on day 1 of her menses.
- **Vital temperature:** The participant preferred warm weather and loved spring.
- **Appetite:** She craved salty and sour foods; she had an aversion for lamb, steak and green beans. She also enjoyed chewing on ice.
- **Sleep:** Her sleep was peaceful; occasionally she had nightmares and spoke in her sleep.
- **Stool:** She had diarrhea with her menses. This usually happened on day 1.

**Mental / emotional:** During her menses she felt sad and was aggravated if she faced a situation of conflict or if she had a thought of death. She felt better if she watched romantic movies or did creative writing. The participant was an artistic person who loved painting and drawing. She was very talkative and loved to socialize. She got angry easily if people lied to her or if they were inquisitive. She was sensitive to people fighting or if she heard sad stories it made her cry. She preferred being alone when she was sad and if she cried. She had a fear of dying from a sickness, darkness (where she couldn't fall asleep with the lights switched off) and insects.

### **Family and medical history**

**Personal history:** Sinusitis which was aggravated by dust and smoke and ameliorated by lying down and fresh air.

**Maternal:** Mother - cholesterol, diabetes mellitus; Grandmother - diabetes mellitus, arthritis, hypertension; Grandfather - diabetes mellitus, glaucoma, toe amputation due to diabetes.

**Paternal:** Father - cholesterol, diabetes mellitus, hypertension, tinea pedis; Grandmother - arthritis, cellulitis; Grandfather - died of lung failure.

### **Physical examination and vital signs**

|                  |                        |
|------------------|------------------------|
| Blood pressure   | 115/80 mm/Hg           |
| Pulse rate       | 90 beats per minute    |
| Respiratory rate | 15 breathes per minute |
| Temperature      | 36.4 °C                |

**Abdominal exam:** Nothing abnormal detected

**Breast exam:** Nothing abnormal detected

**Prescription:** No remedy was prescribed during the first month of the study to provide a baseline for the participant's premenstrual symptoms.



#### 4.3.2 Second consultation: October 2014

##### Main complaint

The following symptoms previously experienced premenstrual remained the same except for the irritability which was ameliorated.

- Irritability, improved (mild) this month; however she had an increased amount of stress and anxiety due to a family funeral.
- Abdominal pain (No changes noted )
- Lower back pain (No changes noted )

##### Generals

- **Vital tone:** No changes noted
- **Vital temperature:** No changes noted
- **Appetite:** No changes noted
- **Sleep:** No changes noted
- **Stool:** The participant developed an acute episode of anal fissure due to diarrhea and she inserted a suppository. The anal fissure was resolved within a week.

**Mental / emotional:** No changes noted

**Menses:** No changes noted

##### Physical examination and vital signs

|                  |                       |
|------------------|-----------------------|
| Blood pressure   | 120/80 mm/Hg          |
| Pulse rate       | 100 beats per minute  |
| Respiratory rate | 15 breaths per minute |
| Temperature      | 36.4 °C               |

**Abdominal examination:** No abnormalities detected

**Breast examination:** No abnormalities detected

## Repertorisation

| Rubric  | Weight | Calc.      | Phos.      | Verat.       | Nat-<br>m. | Sulph      |
|---|--------|------------|------------|--------------|------------|------------|
| Generalities, food and drinks, sour, acid, desires, salt, and | 25     | 3          | 4          | 4            | 4          | 3          |
| Mind, fear, insects, of                                       | 24     | 4          | 1          |              | 1          | 1          |
| Generalities, food and drinks, ice, desires                   | 21     | 3          | 4          | 4            | 1          |            |
| Rectum, diarrhea, menses, during                              | 14     | 1          | 3          | 4            | 1          | 1          |
| Mind, anger, easily   | 11     | 3          | 3          |              | 3          | 1          |
| Mind, work, mental, desire for                                | 10     | 4          |            | 1            | 1          | 1          |
| Mind, talk, talking, talks, sleep, during                     | 9      | 4          | 3          | 1            | 3          | 4          |
| Mind, fear, disease, of                                       | 8      | 4          | 4          | 1            | 1          | 3          |
| Generalities, heat desire                                     | 2      | 4          | 4          | 4            | 4          | 4          |
| <b>Value</b>  |        | <b>287</b> | <b>260</b> | <b>217.6</b> | <b>198</b> | <b>158</b> |
| <b>Percentage</b>   |        | <b>100</b> | <b>91</b>  | <b>76</b>    | <b>69</b>  | <b>55</b>  |

### Motivation for selection of the remedy

*Calcarea carbonica* was chosen because of its tendency to be aggravated by cold and ameliorated by heat as experienced by this participant. Other symptoms that matched the participant to *Calcarea carbonica* included: being affected by sad and horrible events, having a fear for disease, irritability, crying over trivial matters. *Calcarea carbonica* has an aversion to meat as mentioned by this participant (Phatak, 2005). People requiring *Calcarea carbonica* are easily irritable when they not doing anything and become anxious and irritable at intervals. They are hypochondriacs that worry about death and sickness as seen in this participant. The food craving of *Calcarea carbonica* is for sour foods which matched this participants craving. The *Calcarea carbonica* person has contractive aching pains in the epigastrium that compels the person to bend forward as observed by this participant (Vermeulen, 2011).

**Prescription:** *Calcarea carbonica* 30 cH, once daily.

**Prescribing clinician:** Dr Tebogo Tsele-Tebakang

### 4.3.3 Third consultation: November 2014

#### Main complaint

The following symptoms previously experienced premenstrual were no longer present except for the abdominal spasms which remained the same.

- The participant did not get irritable (none) at all.
- Abdominal spasms (mild) were ameliorated when she took one Mybulen tablet.
- Lower back pain (none)

#### Generals

- **Vital tone:** She felt that her energy levels had improved. She also started exercising
- **Vital temperature:** No changes noted
- **Appetite:** No changes noted
- **Sleep:** Her sleep was peaceful and she did not have any nightmares
- **Stool:** She no longer had diarrhea with her menses

**Mental/ emotional:** She had decreased anxiety, stress and sadness compared to the first and second month.

**Menses:** No changes noted

#### Physical examination and vital signs

|                  |                       |
|------------------|-----------------------|
| Blood pressure   | 110/75 mm/Hg          |
| Pulse rate       | 100 beats per minute  |
| Respiratory rate | 14 breaths per minute |
| Temperature      | 36.5 °C               |

**Abdominal examination:** No abnormalities detected

**Breast examination:** No abnormalities detected

**Prescription:** *Calcarea carbonica* 30 cH, once daily

**Prescribing clinician:** Dr Tebogo Tsele-Tebakang

The participants main complaint, energy levels, stool, mental and emotional symptoms had improved therefore the remedy was repeated.

#### 4.3.4 Fourth consultation: December 2014

##### Main complaint

- Irritability (none)
- Abdominal pain (None)
- Lower back pain (None)

##### Generals

- **Vital tone:** her energy levels improved
- **Vital temperature:** no changes
- **Appetite:** No changes noted
- **Sleep:** Improved, peaceful
- **Stool:** Improved

**Mental/emotional:** Improved, felt much better

**Menses:** No changes noted

##### Physical examination and vital signs

|                  |                       |
|------------------|-----------------------|
| Blood pressure   | 120/80 mm/Hg          |
| Pulse rate       | 98 beats per minute   |
| Respiratory rate | 15 breaths per minute |
| Temperature      | 36.3 °C               |

**Abdominal examination:** No abnormalities detected

**Breast examination:** No abnormalities detected

**Prescription:** No remedy was prescribed at this consultation

#### 4.4 Case four

|                |         |
|----------------|---------|
| Age            | 22      |
| Race           | Indian  |
| Occupation     | Student |
| Residency      | Lenasia |
| Marital status | Single  |
| Pregnancies    | 0       |

##### 4.4.1 Initial consultation: August 2014

##### Main complaint: PMS symptoms

A 22 year old female presented with the following PMS symptoms:

- Abdominal bloating (moderate) in her right and left lower abdominal quadrants (suprapubic) two to three days before her menses. The bloating was aggravated at the end of the day and ameliorated in the morning.
- Headaches (severe) that were sub-occipital. They felt tight and radiated to her forehead; they were aggravated if she woke up and ameliorated by a chiropractic adjustments.

**Menstrual history:** The participant had menarche at around 10 years; she has a regular 28 day cycle. Her menses lasted for about 4-5 days. Her menstrual flow was heavy on day 2 followed by a lighter flow.

##### Generals

- **Vital tone:** The participant generally felt tired.
- **Vital temperature:** She felt very cold and preferred heat and warmth.
- **Appetite:** She craved carbohydrates such as cakes and felt very hungry during and before her menses. She had an aversion to beef and pork and got headaches if she drank coffee.
- **Stool:** She used to pass stool once daily, however if she was constipated then she only went every two to three days. The constipation she noticed was caused when she took her iron supplement or had too much fiber.
- She has an aversion to smoke and if people smoked around her.

**Mental / emotional:** Depression (moderate) everything bothered her; she became very sensitive especially when she thought about her previous relationship with her boyfriend. She felt very disappointed and unhappy at the way she was treated. When she felt depressed she used to cry and wanted to be left alone. Crying made her feel better emotionally. The participant was introverted, and generally quiet. She was very creative and artistic. In her previous relationship her partner left her and ignored her, she got very emotional when she thought about how her relationship ended. She cried often because she really liked him and she felt heartbroken.

### **Family and medical history**

**Personal history:** History of endometriosis (5 years ago, laparoscopy to remove endometrial cysts), Hypotension, allergic rhinitis

**Maternal:** Mother - none; Grandmother - hypertension; Grandfather - heart disease.

**Paternal:** Father - none; Grandfather - died of myocardial infarction; Grandmother - diabetes mellitus.

**Medication:** Oral contraceptive pill (Yasmin) for 5 years

### **Physical examination and vital signs**

|                  |                       |
|------------------|-----------------------|
| Blood pressure   | 100/70 mm/Hg          |
| Pulse rate       | 80 beats per minute   |
| Respiratory rate | 12 breaths per minute |
| Temperature      | 35.7 °C               |

**Abdominal exam:** Nothing abnormal detected

**Breast exam:** Nothing abnormal detected

**Prescription:** No remedy was prescribed during the first month of the study to provide a baseline for the participant's premenstrual symptoms.

#### 4.4.2 Second consultation: September 2014

##### Main complaint

The following symptom previously experienced premenstrual remained the same except for abdominal bloating which was aggravated.

- Her abdominal bloating (severe) increased compared to the previous month and was worse at the end of the day.
- Headache (no changes noted )

##### Generals

- **Vital tone:** The participant's energy levels had improved
- **Vital temperature:** no changes noted
- **Appetite:** no changes noted
- **Stool:** She was not constipated this month and passed stool once
- **Sleep:** She didn't sleep enough hours due to her studying, however she had a peaceful sleep.

##### Systems review

- **Nose:** The participant noticed that her allergic rhinitis started and it was worse for dust and better by the rain.

**Mental / emotional:** She felt slightly better but no major changes to her depression (moderate)

**Menses:** The participant's menses came a few days earlier this month

##### Physical examination and vital signs

|                  |                       |
|------------------|-----------------------|
| Blood pressure   | 100/75 mm/Hg          |
| Pulse rate       | 100 beats per minute  |
| Respiratory rate | 13 breaths per minute |
| Temperature      | 35.8 °C               |

**Abdominal examination:** No abnormalities detected

**Breast examination:** No abnormalities detected

**Repertorisation**

| Rubric   | Weight | Nux-  |     |       | Nat- |     |       |
|--|--------|-------|-----|-------|------|-----|-------|
|  |        | Ign.  | v.  | Aur.  | Lyc. | m.  | Puls. |
| Generalities, food and drinks, cakes, desires            | 24     | 1     | 1   | 1     |      |     |       |
| Generalities, heated, warmed, hot, becoming, amel.       | 10     | 4     | 4   | 3     | 4    | 1   |       |
| Generalities, tobacco, aversion, smoking                 | 12     | 4     | 4   |       | 3    | 3   | 4     |
| Head, pain, headache, coffee, agg.                       | 20     | 4     | 4   |       | 1    |     | 3     |
| Head, pain, headache, occiput                            | 3      | 4     | 4   | 4     | 4    | 4   | 4     |
| Mind, grief, ailments from, agg.                         | 8      | 4     | 3   | 4     | 4    | 4   | 4     |
| Mind, grief, deception, from                             | 25     | 4     | 3   | 4     | 4    | 4   | 1     |
| Mind, love, disappointment, unhappy, ailments from, agg. | 12     | 4     | 2   | 4     |      | 4   | 3     |
| Mind, quiet, disposition                                 | 8      | 3     | 1   | 1     | 3    | 3   | 4     |
| <b>Value</b>   |        | 314.5 | 251 | 207.7 | 198  | 194 | 182   |
| <b>Percentage</b>  |        | 100   | 80  | 66    | 63   | 62  | 58    |

**Motivation for selection of the remedy**

The emotional elements of *Ignatia amara* are usually mostly affected as noted in this participant; therefore the mind symptoms were the fundamental reason for prescribing *Ignatia amara*. People requiring *Ignatia amara* are usually nervous, apprehensive, timid, oversensitive, extremely emotional, desire to be alone and has ailments from disappointed love as experienced by this participant. This participant was aggravated by tobacco and coffee which gave her a headache this matched the symptoms of *Ignatia amara* (Vermeulen, 2011).

**Prescription:** *Ignatia amara* 30 cH, once daily.

**Prescribing clinician:** Dr Tebogo Tsele-Tebakang

**4.4.3 Third consultation:** October 2014



## Main complaint

The following symptoms previously experienced premenstrual remained the same except for abdominal bloating which was ameliorated.

- Abdominal bloating (none)
- Headache (no changes noted) stayed the same because she was studying for exams and this contributed to her headaches and lack of sleep.

## Generals

- **Vital tone:** The participant's energy levels had improved
- **Vital temperature:** No changes noted
- **Appetite:** Her food cravings had improved
- **Stool:** Improved, she was less constipated
- **Sleep:** No changes noted

## Systems review

- **Nose:** no changes noted

**Mental/ emotional:** The participant's depression (mild) was much better.

**Menses:** Improved, her menses came at the correct time and was not early this month

## Physical examination and vital signs

|                  |                       |
|------------------|-----------------------|
| Blood pressure   | 100/75 mm/Hg          |
| Pulse rate       | 100 beats per minute  |
| Respiratory rate | 14 breaths per minute |
| Temperature      | 36.5 °C               |

**Abdominal examination:** No abnormalities detected

**Breast examination:** No abnormalities detected

**Prescription:** *Ignatia Amara* 30 cH, once daily.

**Prescribing clinician:** Dr Tebogo Tsele-Tebakang

The participants abdominal bloating, vital tone and her appetite had improved therefore the remedy was repeated.

#### 4.4.4 Fourth consultation: November 2014

##### Main complaint

- Abdominal bloating (severe) increased this month. The abdominal bloating presented the same as the second consultation
- Headache (no changes noted )

##### Generals

- **Vital tone:** The participant's energy levels had improved
- **Vital temperature:** no changes noted
- **Appetite:** No changes
- **Stool:** No constipation
- **Sleep:** Improved compared to the previous months

##### Systems review

- **Nose:** The participant's allergic rhinitis had increased due to the increased amount of dust in the air.

**Mental/ emotional:** The participant's depression (none) improved tremendously.

**Menses:** Same as the previous month

##### Physical examination and vital signs

|                  |                       |
|------------------|-----------------------|
| Blood pressure   | 120/80 mm/Hg          |
| Pulse rate       | 98 beat per minute    |
| Respiratory rate | 15 breaths per minute |
| Temperature      | 36.3 °C               |

**Abdominal examination:** No abnormalities detected

**Breast examination:** No abnormalities detected

**Prescription:** No remedy was prescribed at this consultation.

#### 4.5 Case five

|                |           |
|----------------|-----------|
| Age            | 19        |
| Race           | Indian    |
| Occupation     | Student   |
| Residency      | Killarney |
| Marital status | Single    |
| Pregnancies    | 0         |

##### 4.5.1 Initial consultation: August 2014

##### Main complaint: PMS symptoms

A 19 year old female presented with the following PMS symptoms:

- Irritability (severe) which was caused by people that were being inconsistent and temperamental; her irritability was aggravated by sound and light and ameliorated when she was alone or slept.
- Abdominal spasms (severe) were sharp and stabbing. It started at the umbilicus and radiated laterally both right and left. The pain was ameliorated if she placed a heat pack on the affected area, or by lying in the fetal position. Her symptoms were aggravated by exercise.
- Abdominal bloating (moderate) that occurred even if she had not eaten. Her abdominal bloating was ameliorated if she drank peppermint tea and aggravated by eating carbohydrates.
- Heavy frontal headaches (severe) that were aggravated during her menses, by loud noises as well as during times of stress. The headaches were ameliorated if she drank tea or slept.

##### Menstrual history

The participant had menarche at 13 years. She had a regular cycle that lasted 28-30 days. Her menses lasted for 5 - 6 days. Her menstrual flow was heavy in the beginning followed by a light flow. Her symptoms were aggravated on the first day of her menses.

## Generals

- **Environment:** The participant loved the mornings, she preferred cold and was aggravated by heat
- **Appetite:** She had a good appetite and craved cheese, chocolate and milk, and had an aversion to beans, broccoli, and cauliflower. She felt thirsty but preferred flavored drinks such as peppermint tea.
- **Perspiration:** She perspired under her arms; this was aggravated by heat, exercise or a stuffy area.

## Systemic review

- **Chest:** She was aggravated by oranges which caused wheezing and tightness in her chest.
- **Throat:** Her voice crackled if she spoke too much.

**Mental / emotional:** The participant loved the outdoors. She was very adventurous and loved the thrill of taking risks. She feared not finding a partner in her life. She also had a fear of insects and spiders. She was extremely tidy and obsessive about certain things. She liked coding and placing items neatly into compartments and therefore regards herself as a perfectionist.

## Family and medical history:

**Personal history:** Hypotension, anemia

**Maternal:** Mother - hypertension, diabetes mellitus; Grandfather - diabetes mellitus; Grandmother - diabetes mellitus

**Paternal:** Father- Cholesterol, gout

## Physical examination and vital signs

|                  |                       |
|------------------|-----------------------|
| Blood pressure   | 100/75mm/Hg           |
| Pulse rate       | 80 beats per minute   |
| Respiratory rate | 13 breaths per minute |
| Temperature      | 35.7 °C               |

**Abdominal examination:** No abnormalities detected

**Breast examination:** No abnormalities detected

**Prescription:** No remedy was prescribed during the first month of the study to provide a baseline for the participant's premenstrual symptoms.

#### 4.5.2 Second consultation: September 2014

##### Main complaint

The following symptoms previously experienced premenstrually remained the same, except for the headache which disappeared and the irritability which was ameliorated.

- Irritability (moderate)
- Abdominal spasms (severe) that were piercing and aggravated by stretching, and ameliorated by curling up and bringing her knees towards her abdomen.
- Abdominal bloating (moderate) had stayed the same.
- She never got the headache (none)

##### Generals

- **Environment:** No changes noted
- **Appetite:** No changes noted
- **Perspiration:** No changes noted

##### Systemic review

- **Chest:** No changes noted
- **Throat:** No changes noted

**Mental / emotional:** No changes noted

**Menses:** No changes noted

##### Physical examination and vital signs

|                  |                       |
|------------------|-----------------------|
| Blood pressure   | 100/70 mm/Hg          |
| Pulse rate       | 100 beats per minute  |
| Respiratory rate | 14 breaths per minute |
| Temperature      | 36.2 °C               |

**Abdominal examination:** No abnormalities detected

**Breast examination:** No abnormalities detected

### Repertorisation

| Rubric  | Weight | Nat-  |       |     |      |       |
|---|--------|-------|-------|-----|------|-------|
|   |        | Phos. | Carc. | m.  | Sep. | Calc. |
| Generalities, air, cold, amel.                              | 7      | 4     |       | 3   | 3    | 1     |
| Generalities, exercise, exertion, agg.                      | 2      | 4     | 1     | 4   | 4    | 4     |
| Generalities, food and drinks, cheese, desires              | 14     | 3     | 1     |     | 1    | 3     |
| Generalities, food and drinks, chocolate, desires           | 7      | 4     | 3     | 3   | 3    | 3     |
| Generalities, food and drinks, milk, milk products, desires | 10     | 3     | 3     | 3   | 1    | 3     |
| Generalities, heated, warmed, hot, becoming, aggl.          | 6      | 4     | 3     | 4   | 3    | 3     |
| Head, pain, headache, noise agg.                            | 7      | 3     | 1     | 1   | 3    | 4     |
| Mind, company, aversion to, alone, amel. When               | 13     | 1     |       | 3   | 4    |       |
| Mind, fastidious  | 10     | 1     | 4     | 3   | 1    |       |
| Mind, fear, spiders, of                                     | 19     | 1     | 4     | 1   |      | 1     |
| <b>Value</b>  |        | 170   | 169.8 | 144 | 133  | 127   |
| <b>Percentage</b>   |        | 100   | 100   | 85  | 78   | 75    |

### Motivation for selection of the remedy

*Phosphorus* was chosen for this participant for a number of reasons. Symptoms of the participant that matched *Phosphorus* include: easily irritated and indifferent, they are affected by stressful situations and prefer being alone. *Phosphorus* are aggravated by heat, hot weather, and motion. They are ameliorated by cold as experienced by this participant (Vermeulen, 2011). The participant felt thirsty and preferred cold drinks as noted in *Phosphorus* (Phatak, 2000). Other symptoms experienced by both the participant and *Phosphorus* include: congested headaches that are aggravated by noise and painless hoarseness of their voices. (Nash, 2001)

**Prescription:** *Phosphorus* 30 cH, once daily.

**Prescribing clinician:** Dr Debbie Bredenkamp

#### 4.5.3 Third consultation: November 2014

##### Main complaint

The following symptoms previously experienced premenstrually improved except for the headache which was aggravated.

- Irritability (mild) had improved.
- Abdominal spasms (mild) were much better as the pain was more bearable.
- Abdominal bloating (moderate/mild) had increased slightly compared to previously. It was aggravated from midday onwards.
- Headache (severe) stayed the same.

##### Generals

- **Vital tone:** The participant noticed she had more energy this month
- **Environment:** No changes noted
- **Appetite:** She had no food cravings.
- **Perspiration:** No changes noted
- **Sleep:** She noticed that her sleep was affected at night due to stress caused by her exams. She was worried about the next day's test.

##### Systemic review

- **Chest:** Improved, she had no wheezing or tight chest
- **Throat:** Her voice cracking had disappeared completely.

**Mental/ emotional:** She felt a big improvement in her mental state compared to the previous months.

**Menses:** No changes noted

##### Physical examination and vital signs

|                  |                       |
|------------------|-----------------------|
| Blood pressure   | 110/75 mm/Hg          |
| Pulse rate       | 130 beats per minute  |
| Respiratory rate | 16 breaths per minute |

|             |         |
|-------------|---------|
| Temperature | 36.7 °C |
|-------------|---------|

**Abdominal examination:** No abnormalities detected

**Breast examination:** No abnormalities detected

**Prescription:** *Phosphorus* 30 cH, once daily

**Prescribing clinician:** Dr Debbie Bredenkamp

The participants main complaint, generals, mental/emotional, chest and throat symptoms had improved therefore the remedy was repeated.

#### 4.5.4 Fourth consultation: December 2014

##### Main complaint

The following symptoms previously experienced premenstrually remained the same, except for the headache which disappeared and the irritability and abdominal spasms which was aggravated.

- The participant's irritability (severe) was worse this month she was fighting with everyone and got angry over small matters.
- Abdominal spasm increased (severe) and were aggravated for cold and ameliorated by pressure, lying down or warmth.
- Her abdominal bloating (moderate/mild) stayed the same as last month; the bloating was relieved if she decreased the consumption of carbohydrates.
- She did not experience any headaches (none)

##### Generals

- **Vital tone:** The participant noticed she had more energy this month
- **Environment:** No changes noted
- **Appetite:** Food cravings (none)
- **Perspiration:** No changes noted
- **Sleep:** Improved, peaceful



## Systemic review

- **Chest:** Same as previous month
- **Throat:** Her voice cracking had disappeared completely.
- **Stomach:** The participant had an acute case of nausea and couldn't eat in the morning; she vomited about half an hour after eating and felt much better when she vomited.

**Mental/emotional:** She felt a big improvement in her mental state compared to the previous months.

**Menses:** No changes noted

## Physical examination and vital signs

|                  |                       |
|------------------|-----------------------|
| Blood pressure   | 110/80 mm/Hg          |
| Pulse rate (bpm) | 120 beats per minute  |
| Respiratory rate | 15 breaths per minute |
| Temperature      | 36.2 (°C)             |

**Abdominal examination:** No abnormalities detected

**Breast examination:** No abnormalities detected

**Prescription:** No remedy was prescribed at this consultation

## 4.6 Case six

|                |          |
|----------------|----------|
| Age            | 25       |
| Race           | Indian   |
| Occupation     | Masseuse |
| Residency      | Ormonde  |
| Marital status | Single   |
| Pregnancies    | 0        |

### 4.6.1 Initial consultation:

#### Main complaint: PMS symptoms

A 25 year old female presented with the following PMS symptoms:

- Irritability (severe) that was worse 2-3 days before her menses. Her irritability got worse if she was around people and she preferred being alone. When she was irritable she felt restless and her irritability was ameliorated if she ate chocolate and sour sweets.
- Breast swelling (severe) which felt as if her bra didn't fit correctly. This was ameliorated by her menstrual flow.
- Breast tenderness (moderate) was ameliorated once her menstrual flow began; aggravated if she wore a bra and by touch.
- Depression (severe) before her menses, she cried and had angry outbursts without any reason.
- Food cravings (severe) for sweet, sour and spicy foods.
- Heavy headaches (severe) that were situated at the back of her head and traveled to both her eyes. She felt as if her head was going to burst. The headache was ameliorated by sleep and if she was alone; aggravated by noise.
- She also had sharp abdominal pains (moderate) that radiated to her vagina and thighs. This was aggravated if she was wearing a pad, running or jumping and improved if she leaned forward.

#### Menstrual history

The participant had menarche at around 11 years. She had a regular cycle that lasted 28-30 days. Her menses lasted for 6-7 days. Her menstrual flow was heavy in the beginning. Her symptoms were all aggravated 2-3 days before her menses.

## Generals

- **Vital tone:** The participant felt lethargic during her menses but otherwise she was normally very energetic.
- **Vital temperature:** During her menses she felt cold. Generally she felt hot.
- **Environment:** She generally preferred winter.
- **Appetite:** The participant had a very good appetite. She felt thirsty and drank approximately 8 glasses of water per day. She had an aversion to lamb.
- **Sleep:** Her sleep was restless and she woke up at 3:00 am every evening during her menses.
- **Stool / urination:** During her menses she passed stool often compared to normally.

## Systemic review

- **Ears:** She had seasonal dermatitis on her ears.
- **Musculoskeletal:** Her shoulders and neck tensed easily and was ameliorated by a massage

**Mental / emotional:** The participant was emotional and cried often. She did not get angry, but she got worked up easily. She wanted to be loved, appreciated and taken care off. If she was not appreciated and felt unworthy she ate emotionally. The participant did not like constructive criticism. She loved to read, cook, clean (obsessive cleaner), and was fastidious.

## Family and medical history:

**Personal history:** Sinusitis, hypotension

**Maternal:** Mother - hypertension, insulin resistance, fibromyalgia, and hypercholesterolemia

**Paternal:** Father - cholesterol; Grandmother - died of cancer

## Physical examination and vital signs

|                  |                       |
|------------------|-----------------------|
| Blood pressure   | 120/80 mm/Hg          |
| Pulse rate       | 120 beats per minute  |
| Respiratory rate | 14 breaths per minute |
| Temperature      | 35.7 °C               |

**Abdominal examination:** No abnormalities detected

**Breast examination:** No abnormalities detected

**Prescription:** No remedy was prescribed during the first month of the study to provide a baseline for the participant's premenstrual symptoms.

#### 4.6.2 Second consultation: September 2015

##### Main complaint

The following symptoms previously experienced premenstrually remained the same, except for breast tenderness and food cravings which were ameliorated.

- Irritability (severe) the participant felt more frustrated this month
- Breast swelling (severe)
- Breast tenderness (moderate)
- Depression and anger outbursts (severe)
- Food cravings (moderate)
- Headaches (severe)
- Abdominal pain (moderate)

##### Generals

- **Vital tone:** She felt very restless
- **Vital temperature:** No changes noted
- **Environment:** No changes noted
- **Appetite:** No changes noted
- **Sleep:** Her sleep was restless due to the heat and she had difficulty falling asleep
- **Stool / urination:** No changes noted

##### Systemic review

- **Ears:** No changes noted
- **Musculoskeletal:** Her shoulders and neck tensed easily and was ameliorated by a massage.

**Mental / emotional:** No changes noted

**Menses:** No changes noted

**Physical examination and vital signs**

|                  |                       |
|------------------|-----------------------|
| Blood pressure   | 120/80 mm/Hg          |
| Pulse rate       | 110 beats per minute  |
| Respiratory rate | 14 breaths per minute |
| Temperature      | 35.2 °C               |

**Abdominal examination:** No abnormalities detected

**Breast examination:** No abnormalities detected

**Repertorisation**

| Rubric  | Weigh<br>t | Calc<br>.  | Sulph<br>. | Med<br>.  | Carc<br>.  | Kali-<br>c. |
|---|------------|------------|------------|-----------|------------|-------------|
| Chest, sensitive, mammae, menses, before                        | 28         | 3          |            | 1         | 1          |             |
| Chest, swelling, mammae, menses, before                         | 17         | 3          |            | 1         | 1          | 1           |
| Generalities, food and drinks, mutton, aversion                 | 29         | 1          |            |           | 1          |             |
| Generalities, food and drinks, sour, acid, desires, sweets, and | 27         | 3          | 4          | 3         |            | 3           |
| Generalities, heat, vital, lack of                              | 4          | 4          | 3          | 3         | 2          | 4           |
| Mind, conscientious about trifles                               | 9          | 1          | 4          | 1         | 1          | 1           |
| Mind, restlessness, nervousness, menses, during                 | 17         | 3          | 1          |           |            | 1           |
| Mind, weeping, tearful mood                                     | 3          | 4          | 4          | 4         | 4          | 4           |
| Sleep, waking, midnight, after, two am., about                  | 12         | 1          | 3          | 1         | 1          | 4           |
|   |            |            |            | 165.      |            | 155.        |
| <b>Value</b>  |            | <b>249</b> | <b>166</b> | <b>6</b>  | <b>162</b> | <b>5</b>    |
| <b>Percentage</b>   |            | <b>100</b> | <b>67</b>  | <b>66</b> | <b>65</b>  | <b>62</b>   |

**Motivation for selection of the remedy**

*Calcarea carbonica* was chosen for this participant due to its affinity for PMS symptoms. Symptoms of *Calcarea carbonica* that matched the participant included: profuse menses, breast tenderness before menses that was aggravated when touched (Phatak, 2005), restlessness before

menses which caused the participant to wake up after 3:00 am and she found it difficult to fall asleep headaches that have a deep aching pain (Phatak, 2005; Vermeulen, 2011). People requiring *Calcarea carbonica* are sad, irritable, and peevish and cry over trivial matters as seen in this participant (Phatak, 2005).

**Prescription:** *Calcarea carbonica*, 30cH, once daily

#### 4.6.3 Third consultation: October 2014

The following symptoms previously experienced premenstrually remained the same as the previous month there were no improvements or aggravations.

#### Main complaint

- Irritability (mild) the participant felt much calmer.
- Breast swelling (mild)
- Breast tenderness (mild)
- Depression and anger outbursts (none)
- Food cravings (none)
- Headaches (none)

#### Generals

- **Vital tone:** No restlessness.
- **Vital temperature:** No changes noted
- **Environment:** No changes noted
- **Appetite:** Improved
- **Sleep:** Improved
- **Stool / urination:** No changes noted

#### Systemic review

- **Ears:** No changes noted
- **Musculoskeletal:** Improved

**Mental / emotional:** Improved, feeling much better

**Menses:** No changes noted

**Physical examination and vital signs**

|                  |                       |
|------------------|-----------------------|
| Blood pressure   | 120/80 mm/Hg          |
| Pulse rate       | 120 beats per minute  |
| Respiratory rate | 14 breaths per minute |
| Temperature      | 35.8 °C               |

**Abdominal examination:** No abnormalities detected

**Breast examination:** No abnormalities detected

**Prescription:** *Calcarea Carbonica*, 30cH, once daily.

**Prescribing clinician:** Dr Debbie Bredenkamp

The participants general symptoms had improved therefore the remedy was repeated.

**4.6.4 Fourth consultation:** November 2015

**Main complaint**

The following symptoms previously experienced premenstrual disappeared except for irritability for which was aggravated due to the participant having an acute episode of flu.

- Irritability (mild/moderate) due to having an acute episode of flu.
- Breast swelling (none)
- Breast tenderness (none)
- Depression and anger outbursts (none)
- Food cravings (none)
- Headaches (none)

**Generals**

- **Vital temperature:** No changes noted
- **Environment:** No changes noted
- **Appetite:** Improved
- **Sleep:** Improved

- **Stool / urination:** No changes noted

### **Systemic review**

- **Ears:** No changes noted
- **Musculoskeletal:** Improved
- The participant had the flu and needed to take an antibiotic. Due to the antibiotic she had thrush.

**Mental / emotional:** Improved, feeling much better

**Menses:** No changes noted

### **Physical examination and vital signs**

|                  |                       |
|------------------|-----------------------|
| Blood pressure   | 130/80 mm/Hg          |
| Pulse rate       | 120 beats per minute  |
| Respiratory rate | 14 breaths per minute |
| Temperature      | 36.5 °C               |

**Abdominal examination:** No abnormalities detected

**Breast examination:** No abnormalities detected

**Prescription:** No remedy was prescribed at this consultation.



## 4.7 Case seven

|                |           |
|----------------|-----------|
| Age            | 23        |
| Race           | Indian    |
| Occupation     | Student   |
| Residency      | Greenside |
| Marital status | Single    |
| Pregnancies    | 0         |

### 4.7.1 Initial consultation: August 2014

#### Main complaint: PMS symptoms

A 23 year old female presented with the following PMS symptoms:

- Irritability (moderate) that was caused by people asking meaningless questions, this only occurred a few days before her menses. The irritability was aggravated at night and ameliorated during the day.
- Lower abdominal cramping (severe) that was aggravated one day before her menses. The abdominal cramps were ameliorated by warmth, pressure, distraction and sleep.
- Flatulence (moderate) before her menses which was aggravated at night.
- Lower back pain (severe) that was ameliorated by heat and pressure.
- Sadness (moderate) during her menses if she thought about her dad who had passed away recently; it made her cry and she preferred being on her own when she cried.
- Breast tenderness (mild) usually on the morning of her menses.

#### Menstrual history

The participant had menarche at around 11 years. She had a regular cycle that lasted 30 days. Her menses lasted for 7 days. Her menstrual flow was a heavy on day 1-2 with clots sometimes.

#### Generals

- **Vital tone:** The participant felt mentally tired due to her studies. She preferred weekends and was worse during lectures as they tend to drain her energy.
- **Environment:** She preferred warmth and generally felt cold.

- **Appetite:** The participant had a good appetite. She felt very hungry in the mornings. The participant craved meat, biltong and sweet food such as biscuits and chocolates. She felt thirsty all the time and sipped on small amounts of water. She was aggravated by eating grapes as it caused an itch in her throat.
- **Perspiration:** She perspired often. The perspiration was worse on under her right arm. When it was cold she perspired more.
- **Sleep:** The participant was sensitive to sound and light, but once she was asleep she was fast asleep. She also had many dreams of her late dad.

### **Systemic review**

- **Head:** The participant suffered with headaches occasionally. The headache was aggravated by sunlight and ameliorated by quiet, dark, lying down, eating and placing cold water on her head.
- **Eyes:** She had eye pain if she went in the sun and her eyes began to itch, this was aggravated by bright light and computers.
- **Ears:** The participant's ears used to itch. The itching was only on the right hand side and it was ameliorated by drinking water and applying pressure to her ear.
- **Skin:** She had dry skin and hair which was aggravated in winter.

**Mental / emotional:** The participant was aggravated during the evenings after university and wanted to be left alone. She was reserved, had a quiet disposition, and was friendly. She took a while to open up emotionally to other people. She liked being busy physically by doing gardening, crafts and being outdoors. She was restless if she sat for too long. She had a fear of coming down from a high place and a fear of insects.

### **Family and medical history:**

**Personal history:** Sinusitis

**Maternal:** Mother - hypotension, borderline insulin resistance; Grandfather-hypertension; Grandmother - ulcerative colitis, osteoporosis

**Paternal:** Father - died of a myocardial infarction; Grandmother - diabetes mellitus

## Physical examination and vital signs

|                  |                       |
|------------------|-----------------------|
| Blood pressure   | 110/80 mm/Hg          |
| Pulse rate       | 105 beats per minute  |
| Respiratory rate | 13 breaths per minute |
| Temperature      | 36.2 °C               |

**Abdominal examination:** No abnormalities detected

**Breast examination:** No abnormalities detected

**Prescription:** No remedy was prescribed during the first month of the study to provide a baseline for the participant's premenstrual symptoms.

### 4.7.2 Second consultation: September 2014

#### Main complaint

The following symptoms previously experienced premenstrual remained the same except for the irritability, food cravings, and sadness which had improved.

- Irritability (mild/none)
- Abdominal cramps: No changes noted
- Food cravings (mild)
- Lower back pain: No changes noted
- Sadness (mild)
- Breast tenderness: No changes noted

#### Generals

- **Vital tone:** The participants energy levels were better than last month
- **Environment:** She loved the change in season, the thunderstorms and rain put excitement in the air for her
- **Appetite:** No changes noted
- **Perspiration:** No changes noted
- **Sleep:** No changes noted
- **Stool:** She had loose stools 2 days before her menses she did not experience loose stools the previous month.

## Systemic review

- **Head:** No changes noted
- **Eyes:** No changes noted
- **Ears:** The participant's ear itch was worse this month.
- **Skin:** No changes noted
- **Musculoskeletal:** This month she suffered with knee pain that was a constant dull aching pain which lasted for a day. No modalities were noted

**Mental / emotional:** No changes noted

**Menses:** No changes noted

## Physical examination and vital signs

|                  |                       |
|------------------|-----------------------|
| Blood pressure   | 110/75 mm/Hg          |
| Pulse rate       | 120 beats per minute  |
| Respiratory rate | 14 breaths per minute |
| Temperature      | 36 °C                 |

**Abdominal examination:** No abnormalities detected

**Breast examination:** No abnormalities detected

## Repertorisation

| Rubric  | Weight | Phos. | Lyc. | Sulph. | Calc. | Carc. | Ars. |
|---|--------|-------|------|--------|-------|-------|------|
| Extremities, perspiration                         | 4      | 4     | 4    | 4      | 4     | 1     | 4    |
| Generalities, food and drinks, chocolate, desires | 7      | 4     | 3    | 1      | 3     | 3     |      |
| Generalities, food and drinks, sweets, desires    | 5      | 3     | 4    | 4      | 3     | 3     | 4    |
| Generalities, night, nine pm., five am., agg.     | 2      | 4     | 4    | 4      | 4     | 3     | 4    |
| Generalities, sun, agg.                           | 3      | 3     | 4    | 4      | 4     | 1     | 3    |
| Mind, busy  | 9      | 1     | 1    | 3      | 2     | 3     | 1    |
| Mind, fear, high places                           | 17     | 1     |      | 1      | 1     | 1     |      |

|   |    |            |            |            |              |              |            |
|---|----|------------|------------|------------|--------------|--------------|------------|
| Mind, fear, insects, of                         | 24 | 1          | 1          | 1          | 4            | 1            | 1          |
| Mind, restlessness, nervousness, sitting, while | 19 | 3          | 4          | 1          |              | 1            | 1          |
| Stomach, thirst, small quantities, for, often   | 19 | 4          | 1          | 3          |              |              | 4          |
| <b>Value</b>                                    |    | <b>200</b> | <b>165</b> | <b>165</b> | <b>153.5</b> | <b>149.4</b> | <b>148</b> |
| <b>Percentage</b>                               |    | <b>100</b> | <b>82</b>  | <b>82</b>  | <b>77</b>    | <b>75</b>    | <b>74</b>  |

### Motivation for selection of the remedy

*Phosphorus* patients are reluctant to work study or converse. *Phosphorus* becomes restless if they sit for too long as experienced by this participant (Phatak, 2005). *Phosphorus* has an appetite that is like this participant where they have a ravenous hunger and are usually thirsty for small quantities of water. Other symptoms that match the participant to *Phosphorus* include: aggravated by cold, love thunderstorms, fear for insects and high places. *Phosphorus* generally has regular menses and got weakness in their legs during their menses as observed by this participant (Phatak, 2005; Vermeulen, 2011). It seemed as if the participant had something in her ears and heard sounds in her ears this also matched *Phosphorus* (Phatak, 2005).

**Prescription:** *Phosphorus* 30 cH, once daily.

**Prescribing clinician:** Dr Tebogo Tsele-Tebakang

**4.7.3 Third consultation:** October 2014

### Main complaint

The following symptoms previously experienced premenstrually disappeared except for lower abdominal cramps which had improved.

- Irritability: None
- Lower abdominal cramps: In the mornings she did however have mid abdominal pain that presented as a twisting pain it was ameliorated by passing gas no modalities were noted.
- Food cravings: None
- Lower back pain: None
- Sadness: None
- Breast tenderness: None

## Generals

- **Vital tone:** Her energy levels were improved. She woke up at 04:00am and had lots of energy.
- **Environment:** No changes noted
- **Appetite:** Improved
- **Perspiration:** No changes noted
- **Sleep:** Improved
- **Stool:** She no longer had loose stools

## Systemic review

- **Head:** She also suffered with a dull headache that progressed to a throbbing type headache, which was aggravated by standing, moving or being in the sun. It was ameliorated by placing her hand on her head and if she also took a Panado® tablet. It was aggravated by closing her eyes as it made everything seem as if it was spinning.
- **Eyes:** No changes noted
- **Ears:** No changes noted
- **Skin:** No changes noted
- **Musculoskeletal:** Knee pain (none)

**Mental / emotional:** No changes noted

**Menses:** No changes noted

## Physical examination and vital signs

|                  |                       |
|------------------|-----------------------|
| Blood pressure   | 120/80 mm/Hg          |
| Pulse rate       | 120 beats per minute  |
| Respiratory rate | 15 breaths per minute |
| Temperature      | 36.5 °C               |

**Abdominal examination:** No abnormalities detected

**Breast examination:** No abnormalities detected

**Prescription:** *Phosphorus* 30 cH, once daily.

**Prescribing clinician:** Dr Tebogo Tsele-Tebakang

The participants main complaints as well as generals had improved therefore the remedy was repeated.

#### 4.7.4 Fourth consultation: November 2014

##### **Main complaint**

The following symptoms previously experienced premenstrually ameliorated except for irritability and sadness which was aggravated.

- Irritability: Increased this month
- Abdominal cramps: The abdominal pain had improved. She had some discomfort with gas throughout the day
- Food cravings: None
- Lower back pain: None
- Sadness: Increased this month.
- Breast tenderness: None

##### **Generals**

- **Vital tone:** Her energy levels had improved however she was only tired as she went to bed late at night due to exams
- **Environment:** No changes noted
- **Appetite:** Improved
- **Perspiration:** No changes noted
- **Sleep:** Improved
- **Stool:** She no longer had loose stools

##### **Systemic review**

- **Head:** Headache: None
- **Eyes:** No changes noted
- **Ears:** The ear itch had disappeared

- **Skin:** None
- **Musculoskeletal:** Knee pain: None

**Mental / emotional:** Improved

**Menses:** No changes noted

**Physical examination and vital signs**

|                  |                       |
|------------------|-----------------------|
| Blood pressure   | 110/75 mm/Hg          |
| Pulse rate       | 100 beats per minute  |
| Respiratory rate | 16 breaths per minute |
| Temperature      | 35.9 °C               |

**Abdominal examination:** No abnormalities detected

**Breast examination:** No abnormalities detected

**Prescription:** No remedy was prescribed at this consultation





## 4.8 Case eight

|                |            |
|----------------|------------|
| Age            | 30         |
| Race           | Indian     |
| Occupation     | Unemployed |
| Residency      | Crosby     |
| Marital status | Married    |
| Pregnancies    | 3          |

### 4.8.1 Initial consultation: August 2014

#### Main complaint: PMS symptoms

A 30 year old female presented with the following PMS symptoms:

- Irritability (moderate) which was aggravated by her kids. She wanted someone to talk to because she felt lonely. Her irritability ameliorated if she was relaxing, or sitting quietly.
- Depression (severe) she had many sad thoughts going through her mind especially when she was alone. Things that made her sad included sad movies or speaking to her mum who was living overseas.
- Sensitive breasts (moderate) and nipple tenderness which was aggravated by touch. The participant had ravenous food cravings for spicy food and fish.
- Throbbing frontal headaches (very severe) which were on the left side. Her headaches were ameliorated if she went out for fresh air or by vomiting. They were aggravated if she was lying down and by bright lights. She feared getting the headache because it was severe.

#### Menstrual history

- The participant had menarche at 17 years. She had a regular cycle that lasted 28 days. Her menses lasted for 8 days. Her menstrual flow was heavy from day 1-3 and then followed by a light brownish colour discharge that had a fishy smell. She had thick clots on day 1-2. Her menstrual blood also stained her underwear. Her flow was improved by sitting or lying down and aggravated at night or if she was standing. The participant had dysmenorrhea with sharp spasmodic pain. This occurred on day 1-2 and was aggravated

by pressure and ameliorated by heat. When the participant applied heat to the area she noticed an increase in menstrual flow.

## Generals

- **Vital tone:** The participant only felt tired during her menses.
- **Vital temperature:** She preferred heat and was aggravated in winter because her hands and feet got cold
- **Appetite:** She had an aversion to boiled vegetables and was aggravated by cold food and drink as it gave her a throat infection. She was thirstless and drank 3-4 glasses of water per day.
- **Sexual function:** She noticed that when she had sexual intercourse close to the expected date of her menses, her menses came a few days early.

**Mental / emotional:** The participant felt well emotionally. She felt hurt when she thought about her past as she was hurt many times emotionally and physically. She was also ill-treated by her in-laws however she felt better if she spoke to people about her problems. When she got angry and shouted it made her feel better.

## Family and medical history

**Personal history:** None

**Maternal:** Mother - diabetes mellitus, hypertension; Grandmother - hypertension

**Paternal:** Father - hypertension, asthma; Grandmother - tuberculosis; Grandfather - stroke

## Physical examination and vital signs

|                  |                       |
|------------------|-----------------------|
| Blood pressure   | 127/78 mm/Hg          |
| Pulse rate       | 80 beats per minute   |
| Respiratory rate | 14 breaths per minute |
| Temperature      | 36.5 °C               |

**Abdominal examination:** On deep palpation of the abdomen the participant presented with a pain that radiated from the right side of her umbilicus to the left side of her umbilicus. Nothing abnormal was detected on percussion, auscultation, and inspection.

**Breast examination:** No abnormalities detected

**Prescription:** No remedy was prescribed during the first month of the study to provide a baseline for the participant's premenstrual symptoms.

#### 4.8.2 Second consultation: September 2014

##### Main complaint

The following symptoms previously experienced premenstrual remained the same except for depression which was aggravated.

- Irritability: Moderate
- Depression had worsened, she felt very upset and hurt when she thought of the past. This caused her to cry. She felt she was being used by her husband and her in-laws. She felt she needed to be appreciated. Her symptoms were ameliorated when she was alone and therefore kept herself busy.
- Sensitive breasts and nipple tenderness: Moderate
- Headache: Very severe

##### Generals

- **Vital tone:** No changes noted
- **Vital temperature:** No changes noted
- **Appetite:** No changes noted
- **Sexual Function:** No changes noted

**Mental / emotional:** No changes noted

**Menses:** No changes noted

##### Physical examination and vital signs

|                  |                       |
|------------------|-----------------------|
| Blood pressure   | 110/75 mm/Hg          |
| Pulse rate       | 90 beats per minute   |
| Respiratory rate | 14 breaths per minute |
| Temperature      | 35.9 °C               |

**Abdominal examination:** No abnormalities detected

**Breast examination:** No abnormalities detected

**Repertorisation**

| Rubric  | Weight | Arg-  |      |      |       |       |
|---|--------|-------|------|------|-------|-------|
|   |        | n.    | Sep. | Ars. | Puls. | Phos. |
| Back, heaviness, weight, sacral region  | 21     | 3     | 3    |      | 1     |       |
| Female, metrorrhagia, hemorrhage, coition, after  | 25     | 4     | 3    | 3    | 1     |       |
| Female, pain, stitching   | 8      | 2     | 4    | 4    | 3     | 4     |
| Generalities, air, cold, desires  | 21     | 1     |      |      | 4     | 1     |
| Generalities, food and drinks, spices, condiments, piquant, highly seasoned food, desires | 9      | 1     | 1    | 3    | 3     | 4     |
| Head, pain, headache, left  | 3      | 4     | 4    | 3    | 3     | 4     |
| Head, pain, headache, pulsating, throbbing  | 3      | 4     | 4    | 4    | 4     | 4     |
| Head, pain, headache, vomiting, amel.   | 20     | 1     | 3    |      |       |       |
| Mind, sadness, alone, being, agg.   | 17     | 1     |      | 4    |       | 3     |
| <b>Value</b>  |        | 235.3 | 183  | 159  | 158   | 124   |
| <b>Percentage</b>   |        | 100   | 78   | 67   | 67    | 53    |

**Motivation for selection of the remedy**

The participant's head symptoms that she presented with, before and during her menses were the fundamental reason for prescribing *Argentum nitricum*. The head symptoms of the participant that matched *Argentum nitricum* include: headaches that were congested with throbbing of the carotids, the headache was aggravated on the left side; the participant had heaviness to her head which was ameliorated by applying pressure or bandaging the area, her headache was followed by weakness. *Argentum nitricum* also has metrorrhagia after coition as experienced by this participant (Vermeulen, 2011). *Argentum nitricum* also has heaviness in the sacrum before menses as noticed by this participant. Mentally the participant spoke about her problems and felt that she was not liked by her family as seen in *Argentum nitricum* (Phatak, 2005).

**Prescription:** *Argentum nitricum*, 6cH twice daily.

**Prescribing clinician:** Dr Tebogo Tsele-Tebakang

#### **4.8.3 Third consultation: October 2014**

##### **Main complaint**

The following symptoms previously experienced premenstrual remained the same except for the headache which was aggravated.

- Irritability: No changes noted
- Depression: No changes noted compared to the previous month
- Sensitive breasts and nipple tenderness: No changes
- Headache: Her headache was severe and with increased blood flow from her menses her headache got worse.

##### **Generals**

- **Vital tone:** No changes
- **Vital temperature:** No changes
- **Appetite:** No changes
- **Sexual Function:** No changes noted

##### **Systemic review**

- **Abdomen:** The participant noticed that this month she had abdominal spasms and diarrhea which she had not experienced previously, aggravated if she ate any type food. No other modalities were noticed.

**Mental / emotional:** No changes noted

**Menses:** The participant noticed that when she had sexual intercourse closer to the expected date of her menses then her menses did not come early as in the previous months. Her menstrual bleeding was heavy and clotted on the first two days and the menstrual flow was aggravated if she walked or stood up.

## Physical examination and vital signs

|                  |                       |
|------------------|-----------------------|
| Blood pressure   | 100/88 mm/Hg          |
| Pulse rate       | 90 beats per minute   |
| Respiratory rate | 12 breaths per minute |
| Temperature      | 35.9 °C               |

**Abdominal examination:** No abnormalities detected

**Breast examination:** No abnormalities detected

## Repertorisation:

| Rubric  | Weight | Puls.      | Cocc.      | Bel        |
|---|--------|------------|------------|------------|
| Female, menses, clotted, coagulated   | 6      | 4          | 4          | 4          |
| Female, menses, profuse   | 3      | 4          | 4          | 4          |
| Female, menses, profuse, gushes, in   | 21     | 1          | 3          | 3          |
| Female, menses, profuse, walking, agg.  | 26     | 1          | 4          |            |
| Generalities, food and drinks, spices, condiments, piquant, highly seasoned food, desires | 9      | 3          |            |            |
| Generalities, pain, lying, down agg.  | 11     | 3          | 1          | 3          |
| Head, pain, headache, air, open, amel.  | 5      | 4          |            | 1          |
| Head, pain, headache, left  | 3      | 3          | 1          | 3          |
| Head, pain, headache, menses, before  | 9      | 3          | 1          | 3          |
| Head, pain, headache, menses, during  | 7      | 3          | 3          | 4          |
| Head, pain, headache, pulsating, throbbing  | 3      | 4          | 3          | 4          |
| Head, pain, headache, pulsating, throbbing, pressure, amel.                               | 29     | 4          |            |            |
| Stomach, vomiting, headache, during   | 6      | 4          | 4          | 4          |
| <b>Value</b>  |        | <b>281</b> | <b>216</b> | <b>168</b> |
| <b>Percentage</b>   |        | <b>100</b> | <b>77</b>  | <b>60</b>  |

## Motivation for selection of remedy

The remedy was changed to *Pulsatilla* because the participant had not improved on the previous remedy. The case was re-evaluated and repertorised and a new remedy was chosen. *Pulsatilla*

can be indicated for violent headaches that go to the one side they are severe and throbbing headache, the headache was ameliorated by walking in open air, vomiting, pressure and placing something tight over the painful area. *Pulsatilla* has profuse menses and heaviness in the lumbar region of the back this was also experienced by this participant (Vermeulen, 2011). *Pulsatilla* has thick dark menses and suffers with bearing down pains, which symptoms matched the participant (Phatak, 2005).

**Prescription:** *Pulsatilla* 6cH, twice daily.

**Prescribing clinician:** Dr Tebogo Tsele-Tebakang

**4.8.4 Fourth consultation:** November 2014

### **Main complaint**

The following symptoms previously experienced premenstrual were ameliorated.

- Irritability: Mild
- Depression: Moderate / mild
- Sensitive breasts and nipple tenderness: Mild
- Headache: The participant had a headache (moderate/mild) but it was not as severe as the previous months

### **Generals**

- **Vital tone:** Her energy levels had improved tremendously
- **Vital temperature:** No changes noted
- **Appetite:** No changes noted
- **Sexual Function:** No changes noted

### **Systemic review**

- **Abdomen:** The participant had not experienced diarrhea or abdominal cramps this month.

**Mental / emotional:** The participant felt much stronger mentally this month. Her depression had improved.

**Menses:** Dysmenorrhea had improved

**Physical examination and vital signs**

|                  |                       |
|------------------|-----------------------|
| Blood pressure   | 100/75 mm/Hg          |
| Pulse rate       | 90 beats per minute   |
| Respiratory rate | 14 breaths per minute |
| Temperature      | 35.4 °C               |

**Abdominal examination:** No abnormalities detected

**Breast examination:** No abnormalities detected

**Prescription:** No remedy was prescribed at this consultation.





## 4.9 Case nine

|                |          |
|----------------|----------|
| Age            | 38       |
| Race           | Indian   |
| Occupation     | Educator |
| Residency      | Ridgeway |
| Marital status | Married  |
| Pregnancies    | 2        |

### 4.9.1 Initial consultation: September 2014

#### Main complaint: PMS symptoms

A 38 year old female with the following PMS symptoms:

- Irritability (severe) which was ameliorated if the participant relaxed. It was aggravated if her children troubled her or if she was screaming.
- Swelling of her extremities (severe) especially her feet before her menses.
- Abdominal distention (moderate) which was ameliorated once her menses commenced.
- Lower abdominal spasms that felt like a pulling sensation. She got it every month, 1-2 days before her menses. The pain was ameliorated by heat and a hot shower.
- Lower back and shoulder pain (moderate), it was a heavy type of pain that moved around and was aggravated before her menses and ameliorated if she applied pressure.
- She also got calf muscle spasms (moderate) on the day of her menses this was aggravated at 3:00 – 4:00 am.

#### Menstrual history

The participant had menarche at 14 years. She had a regular cycle that lasted 25-28 days. Her menses lasted for 5 days. She had clots on the first day of her menses.

#### Generals

- **Environment:** The participant enjoyed the mornings and afternoons. She preferred summer.
- **Perspiration:** She felt very hot and sweaty in the evenings when she slept. This was aggravated before her menses.

- **Appetite:** She craved sweet, sour and spicy foods before her menses.
- **Sleep:** The participant had a restless sleep; she would have a 3 hour deep sleep then would wake up and be unable to fall asleep. She felt better if she slept in the sun during the day.

### Systemic review

- **Feet:** She occasionally had burning of her heels that was ameliorated if it was cold, if she walked barefoot or wore high shoes.
- **Eyes:** If the participant strained her eyes, her vision was blurred. This was aggravated by sunlight.
- **Ears:** The participant also had right side ear pain before her menses nothing ameliorated the pain.
- **Nose:** If her sinuses troubled her, then her chest felt heavy.

**Mental / emotional:** The participant loved the outdoors, going to shows and camping. She had good relationships and was friendly. The participant felt that time went too fast. She had anxiety that was caused if her children took too long to get ready for school. Stresses to be on time made her feel anxious.

### Family and medical history:

**Personal history:** Three C-section births, two cataract surgeries on the left eye, allergies

**Maternal:** Mother - diabetes mellitus

**Paternal:** Father - diabetes mellitus, cardiovascular problems; Grandfather - died of a myocardial infarction

### Physical examination and vital signs

|                  |                       |
|------------------|-----------------------|
| Blood pressure   | 110/75 mm/Hg          |
| Pulse rate       | 100 beats per minute  |
| Respiratory rate | 14 breaths per minute |
| Temperature      | 36.2 °C               |

**Abdominal examination:** No abnormalities detected

**Breast examination:** No abnormalities detected

**Prescription:** No remedy was prescribed during the first month of the study to provide a baseline for the participant's premenstrual symptoms.

#### 4.9.2 Second consultation: October 2014

##### Main complaint

The following symptoms previously experienced premenstrually remained the same no changes were noted

- Irritability: Severe
- Swelling of extremities: Severe
- Abdominal distention: Moderate
- Lower back and shoulder pain: Moderate
- Calf spasms: Moderate

##### Generals

- **Environment:** No changes noted
- **Perspiration:** No changes noted
- **Appetite:** No changes noted
- **Sleep:** No changes noted

##### Systemic review

- **Feet:** No changes noted
- **Eyes:** No changes noted
- **Ears:** No changes noted
- **Nose:** No changes noted

**Mental / emotional:** Anxiety had increased she felt she could not breathe. This was ameliorated by motion or drinking cold water.

**Menses:** No changes noted

## Physical examination and vital signs

|                  |                       |
|------------------|-----------------------|
| Blood pressure   | 110/75 mm/Hg          |
| Pulse rate       | 90 beats per minute   |
| Respiratory rate | 14 breaths per minute |
| Temperature      | 36.4 °C               |

**Abdominal examination:** No abnormalities detected

**Breast examination:** No abnormalities detected

## Repertorisation

| Rubric  | Weight | Sulph.     | Puls.      | Graph.       | Ars.       | Sil.         |
|---|--------|------------|------------|--------------|------------|--------------|
| Abdomen, distension, tympanic                     | 6      | 1          | 4          | 4            | 4          | 3            |
| Extremities, cramps, legs, calves, evening        | 25     | 1          | 3          |              | 3          | 3            |
| Extremities, heat, burning, feet                  | 12     | 4          | 4          | 3            | 1          | 1            |
| Extremities, swelling, feet                       | 5      | 4          | 4          | 4            | 4          | 4            |
| Eyes, photophobia                                 | 4      | 4          | 4          | 4            | 4          | 4            |
| Female, menses, painful, dysmenorrhea             | 3      | 4          | 4          | 4            | 3          | 3            |
| Generalities, food and drinks, sweets, desires    | 5      | 4          | 3          | 4            | 4          | 1            |
| Generalities, morning, five am., nine am., agg.   | 2      | 4          | 4          | 4            | 4          | 4            |
| Mind, anxiety, fear, with                         | 8      | 1          | 3          | 3            | 4          | 1            |
| Mind, time, passes too quickly, appearing shorter | 14     | 1          |            |              |            |              |
| Perspiration, menses, before                      | 23     | 3          |            | 3            |            | 1            |
| Sleep, disturbed                                  | 3      | 4          | 4          | 4            | 4          | 4            |
| <b>Value</b>                                      |        | <b>201</b> | <b>181</b> | <b>174.3</b> | <b>167</b> | <b>159.5</b> |
| <b>Percentage</b>                                 |        | <b>100</b> | <b>90</b>  | <b>87</b>    | <b>83</b>  | <b>79</b>    |

### **Motivation for selection of the remedy**

*Sulphur* was chosen for a number of reasons. Symptoms of the participant that matched *Sulphur* include: heat and burning, cramps especially in her calves, limbs feel heavy and swollen (Phatak, 2005), restlessness caused by rush of blood to an area and, anxiety which was worse at night. *Sulphur* is generally better if they move around and in open air as seen in this participant. *Sulphur* become impatient over trivial matters and is restless before menses this was also experienced by the participant. *Sulphur* has a desire for sweets before menses (Vermeulen, 2011).

**Prescription:** *Sulphur* 6 cH, twice daily

**Prescribing clinician:** Dr Tebogo Tsele-Tebakang

### **4.9.3 Third consultation: October 2014**

#### **Main complaint**

The following symptoms previously experienced premenstrually disappeared except for the irritability which aggravated and swelling of extremities which ameliorated

- Irritability: Severe
- Swelling of extremities: Moderate
- Abdominal distention: None
- Lower back and shoulder pain: None
- Calf spasms: None

#### **Generals**

- **Environment:** No changes noted
- **Perspiration:** Improved, less than previously
- **Appetite:** The participant had no food cravings
- **Sleep:** No changes noted

#### **Systemic review**

- **Feet:** No changes noted
- **Eyes:** No changes noted

- **Ears:** No changes noted
- **Nose:** No changes noted

**Mental / emotional:** The participant's anxiety was worse than the previous months mainly due to increased stress at work. The feeling that time went too fast had improved

**Menses:** No changes noted

**Physical examination and vital signs**

|                  |                       |
|------------------|-----------------------|
| Blood pressure   | 100/75 mm/Hg          |
| Pulse rate       | 100 beats per minute  |
| Respiratory rate | 16 breaths per minute |
| Temperature      | 36 °C                 |

**Abdominal examination:** No abnormalities detected

**Breast examination:** No abnormalities detected

**Prescription:** *Sulphur* 6 cH, twice daily.

**Prescribing clinician:** Dr Tebogo Tsele-Tebakang

Some of the participant's main complaints, her perspiration and her food cravings had improved therefore the remedy was repeated.

**4.9.4 Fourth consultation:** December 2014

**Main complaint**

The following symptoms previously experienced premenstrual disappeared except for swelling of extremities which aggravated and irritability which ameliorated.

- Irritability: The participant's irritability (mild) was much better than the previous months
- Swelling of extremities: Increased compared to the previous months
- Abdominal distention: None
- Lower back and shoulder pain: None
- Calf spasms: None

## Generals

- **Environment:** No changes noted
- **Perspiration:** Improved
- **Appetite:** The participant had no food cravings
- **Sleep:** Improved

## Systemic review

- **Feet:** Improved (less swelling)
- **Eyes:** No changes noted
- **Ears:** No changes noted
- **Nose:** No changes noted

**Mental / emotional:** Her anxiety also improved. She had also tried to relax more often. The participant also did not notice that time was going too fast.

**Menses:** No changes noted

## Physical examination and vital signs

|                  |                       |
|------------------|-----------------------|
| Blood pressure   | 100/75 mm/Hg          |
| Pulse rate       | 100 beats per minute  |
| Respiratory rate | 16 breaths per minute |
| Temperature      | 36 °C                 |

**Abdominal examination:** No abnormalities detected

**Breast examination:** No abnormalities detected

**Prescription:** No remedy was prescribed at this consultation

#### 4.10 Case ten

|                |          |
|----------------|----------|
| Age            | 32       |
| Race           | Indian   |
| Occupation     | Educator |
| Residency      | Ormonde  |
| Marital status | Married  |
| Pregnancies    | 3        |

##### 4.10.1 Initial consultation: September 2014

##### Main complaint: PMS symptoms

A 32 year old female presented with the following PMS symptoms:

- Irritability and anger (severe) that made the participant scream at her kids if they troubled her. She also got frustrated for no reason and preferred being on her own.
- Sadness (severe) where she cried before her menses. She preferred being alone, when she thought about sad things she felt worse. She felt better if she prayed.
- Lower back pain (severe/moderate) that was sharp and could be pointed out. It was ameliorated by taking painkillers or sitting with pressure against the area.
- Breast tenderness (moderate) on her left breast. It was a sharp pain that came and went.
- Abdominal bloating (severe) that felt as if she had to pull in her stomach, nothing improved the bloating and it was aggravated if she wore tight trousers, or ate crisp and chips.
- Frontal headaches (mild) occasionally, it was an icy cold headache that was aggravated by light, noise, cold food or drinks being tired, or if she was in the car.

##### Menstrual history

The participant had menarche at 11 years. She had a regular cycle that lasted 25 days. Her menses lasted for 8 days. Her menstrual flow was a heavy flow in the beginning and lighter by day 5, and she had dark brown clots on day one. Her menstrual blood stained her underwear occasionally.



## Generals

- **Vital tone:** The participant felt weak before her menses.
- **Vital temperature:** She felt shivers in her body that happened randomly. She preferred heat.
- **Appetite:** If the participant ate chocolate, tea or coffee she experienced headaches.
- **Sleep:** Her sleep was peaceful but she was always very busy in her dreams.

## Systemic review

- **Ears:** The participant got sharp pains in both her ears it was behind her ears and felt like there was water in her ears.
- **Musculoskeletal:** She also got muscular spasms in her hips, neck and entire back it was ameliorated if she stretched and moved.

**Mental / emotional:** The participant felt very overwhelmed, she liked to analyse everything. She felt that her brain was in too many places during the week because she was so busy. She enjoyed helping people, project managing, swimming and running. If she was upset emotionally she was ameliorated by motion such as exercising. She was aggravated if she thought about her problems.

**Family and medical history:**

**Personal history:** None

**Maternal:** Mother - hypertension, diabetes mellitus, and arthritis

**Paternal:** Father - hypotension

## Physical examination and vital signs

|                  |                       |
|------------------|-----------------------|
| Blood pressure   | 130/80 mm/Hg          |
| Pulse rate       | 110 beats per minute  |
| Respiratory rate | 15 breaths per minute |
| Temperature      | 36.5 °C               |

**Abdominal examination:** No abnormalities detected

**Breast examination:** No abnormalities detected

**Prescription:** No remedy was prescribed during the first month of the study to provide a baseline for the participant's premenstrual symptoms.

#### **4.10.2 Second consultation:** October 2014

##### **Main complaint**

The following symptoms previously experienced premenstrual remained the same and no changes were noted.

- Irritability: Severe
- Sadness: Severe
- Lower back pain: Severe / Moderate
- Breast tenderness: Moderate
- Abdominal bloating: Severe
- Headache: Mild

##### **Generals**

- **Vital tone:** No changes noted
- **Vital temperature:** No changes noted
- **Appetite:** No changes noted
- **Sleep:** No changes noted

##### **Systemic review**

- **Ears:** No changes noted
- **Musculoskeletal:** No changes noted

**Mental / emotional:** Less irritability (moderate) was experienced than the previous month but no other changes.

## Physical examination and vital signs

|                  |                       |
|------------------|-----------------------|
| Blood pressure   | 125/80 mm/Hg          |
| Pulse rate       | 95 beats per minute   |
| Respiratory rate | 13 breaths per minute |
| Temperature      | 36 °C                 |

**Abdominal examination:** No abnormalities detected

**Breast examination:** No abnormalities detected

## Repertorisation

| Rubric  | Weigh<br>t | Lyc<br>.   | Phos<br>.  | Bry<br>.   | Ign.<br>.  | Calc<br>.  | Sep.<br>.  |
|---|------------|------------|------------|------------|------------|------------|------------|
| Chest, sensitive, mammae                              | 14         | 1          | 3          | 3          |            | 3          | 1          |
| Female, menses, clotted, coagulated,<br>dark          | 13         | 3          |            |            | 3          | 1          |            |
| Female, menses, profuse                               | 3          | 4          | 4          | 4          | 4          | 4          | 4          |
| Generalities, evening, six pm., nine pm.,<br>amel.    | 7          | 1          | 2          | 3          |            | 1          | 4          |
| Generalities, heated, warmed, hot,<br>becoming, amel. | 10         | 4          | 3          | 3          | 4          | 3          | 3          |
| Generalities, motion, motions, amel.                  | 5          | 4          | 1          | 2          | 2          | 3          | 4          |
| Generalities, shuddering, shivering                   | 6          | 4          | 1          | 1          | 1          | 1          | 2          |
| Generalities, weakness, menses, before                | 18         | 1          | 1          |            | 3          | 1          | 1          |
| Head, pain, headache, light, agg.                     | 9          | 3          | 4          | 3          | 3          | 4          | 3          |
| Mind, anger, easily                                   | 11         | 4          | 3          | 3          | 1          | 3          | 1          |
| Mind, dreams, busy, being                             | 16         | 1          | 3          | 4          | 1          |            | 1          |
| <b>Value</b>  |            | <b>204</b> | <b>178</b> | <b>173</b> | <b>165</b> | <b>160</b> | <b>151</b> |
| <b>Percentage</b>                                     |            | <b>100</b> | <b>87</b>  | <b>85</b>  | <b>81</b>  | <b>78</b>  | <b>74</b>  |

## Motivation for selection of the remedy

Even though *Lycopodium* scored the highest *Calcarea carbonica* was prescribed because it fitted the case better. *Calcarea carbonica* was chosen for a number of reasons. Symptoms of this

participant that matched *Calcarea carbonica* include: very sensitive and tender breasts which were worse for touch, pains in there abdomen and backs occurs during menses and are described as labour like pains, and profuse menses that were prolonged. *Calcarea carbonica* was worse for cold and prefers warmth. When they are sleeping ideas crowd their minds and they cannot fall asleep as noted in this participant (Vermeulen, 2011).

**Prescription:** *Calcarea carbonica* 30 cH once daily

**Prescribing Clinician:** Dr Tebogo Tsele-Tebakang

#### 4.10.3 Third consultation: November 2014

##### **Main complaint**

The following symptoms previously experienced premenstrual had ameliorated and headache had disappeared.

- Irritability: Mild
- Sadness: Mild
- Lower back pain: Mild it was ameliorated if she stretched
- Breast tenderness: Mild
- Abdominal bloating: Mild
- Headache: None

##### **Generals**

- **Vital tone:** Improved tremendously, she felt that she had energy during her menses.
- **Vital temperature:** No changes noted
- **Appetite:** Improved tremendously
- **Sleep:** No changes noted

##### **Systemic review**

- **Ears:** The participants still felt the water in her ear but she had no pain in her ear.
- **Musculoskeletal:** No changes noted

### Physical examination and vital signs

|                  |                       |
|------------------|-----------------------|
| Blood pressure   | 120/80 mm/Hg          |
| Pulse rate       | 100 beats per minute  |
| Respiratory rate | 17 breaths per minute |
| Temperature      | 36 °C                 |

**Abdominal examination:** No abnormalities detected

**Breast examination:** No abnormalities detected

**Prescription:** *Calcarea carbonica*, 30cH, once daily.

**Prescribing clinician:** Dr Tebogo Tsele-Tebakang

The participant's main complaint, vital tone, appetite as well as her ear symptoms had improved, therefore the remedy was repeated.

#### 4.10.4 Fourth consultation: December 2014

##### Main complaint

The following symptoms previously experienced premenstrual had remained the same except for lower back pain which ameliorated.

- Irritability: Mild
- Sadness Mild
- Lower back pain None
- Breast tenderness: Mild
- Abdominal bloating: Mild
- Headache: None

##### Generals

- **Vital tone:** Improved tremendously
- **Vital temperature:** No changes noted
- **Appetite:** Improved tremendously
- **Sleep:** Improved

**System review:** There was still the feeling of water in her ear but with no pain.

**Physical examination and vital signs**

|                  |                       |
|------------------|-----------------------|
| Blood pressure   | 120/80 mm/Hg          |
| Pulse rate       | 95 beats per minute   |
| Respiratory rate | 16 breaths per minute |
| Temperature      | 36.4 °C               |

**Abdominal examination:** No abnormalities detected

**Breast examination:** No abnormalities detected

**Prescription:** No remedy was prescribed at this consultation



#### 4.11 Overview for all Participants

Figure 4.11.1 shows the mean total symptom score for each participant

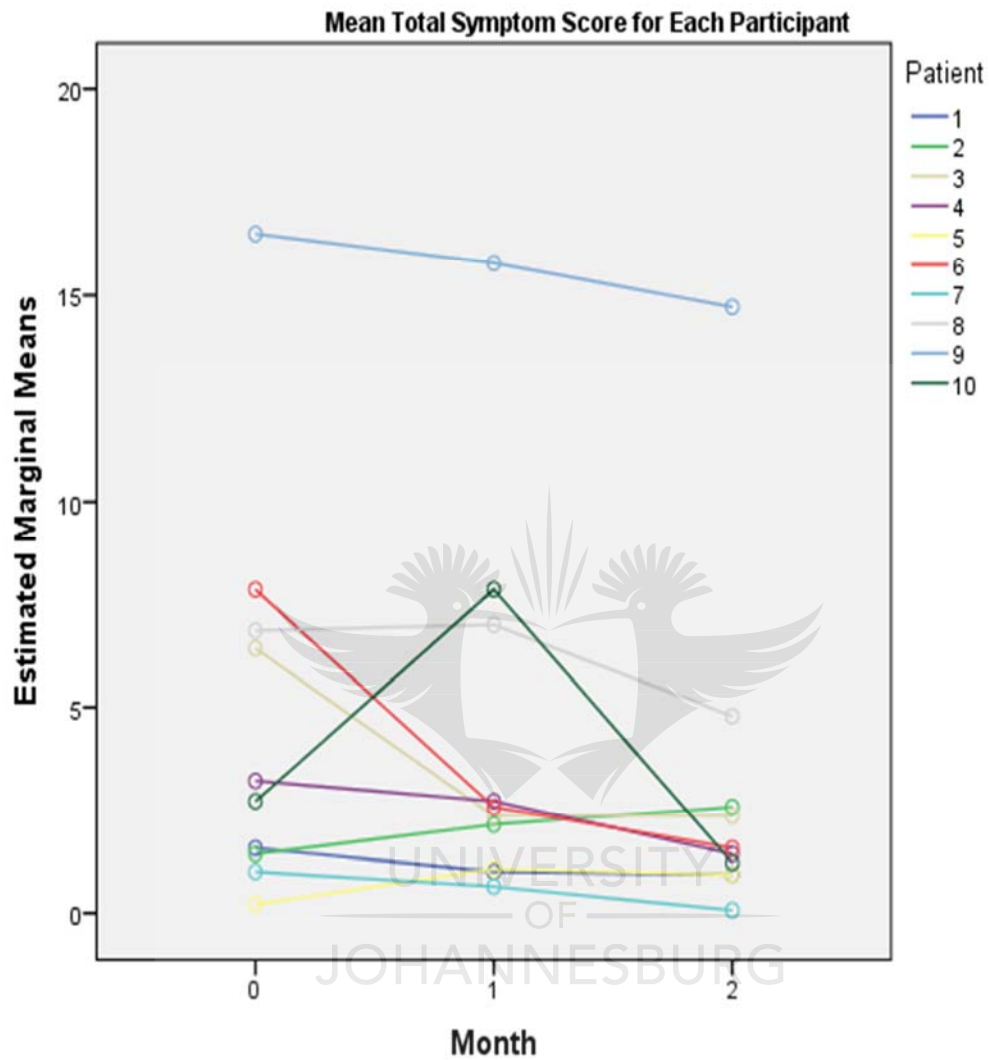


Figure 4.11.1 Graph illustrating the mean total scores for each participant in the premenstrual phase over the two month treatment period

## CHAPTER 5

### RESULTS AND DISCUSSION

#### 5.1 Introduction

**Hypothesis:** It was hypothesised that individualised homeopathic treatment would be effective in the treatment of PMS in Indian females.

In this three month case study, ten participants were required to complete a PMS chart (Appendix E) which graded the severity of PMS symptoms on a daily basis until their next menstrual cycle. They also were required to note down the dates of menstruation. A baseline of each participant's premenstrual symptoms was established by an initial treatment free month. Participants were treated using individualised homeopathic treatment for the remaining two months. The evaluation of the symptoms in the PMS chart was subjective and was based on a 5 point scale where 0 - "no symptom", 1- "very mild", 2 - "mild", 3 - "severe", 4 - "extremely severe".

The structure and statistical analysis which the trial followed was similar to that of Patel (2010) and Mainganye (2011) who studied the effect of the homeopathic simillimum on white and black females respectively suffering with symptoms of premenstrual syndrome using ten case studies over a period of four months.

The three month trial period of this study was divided into stages:

- Month 0: This was the initial treatment free month used as a baseline, where no treatment was given. The results from this month were recorded after the menstrual period
- Month 1: The first treatment month, the results from this month were recorded after the first menstrual period
- Month 2: The second treatment month, the results from this month were recorded after the second menstrual period

##### 5.1.1 Results of Single Symptoms

The premenstrual phase/luteal phase are 14 days before menstruation. PMS symptoms were recorded on the PMS chart and used for statistical analysis. The results from the PMS charts were used to determine the mean scores of each individual premenstrual symptom during the initial treatment free month and this was compared to the mean individual premenstrual symptom during the following two months, where treatment was prescribed.



### 5.1.2 Statistical Significance of P- Values

In order to test the hypothesis non-parametric Wilcoxon signed ranked test and Friedman test were used. The P-values were determined between each premenstrual phase of the menstrual cycle during the three month study period (Van Staden, 2014).

- Friedman test

This is a non-parametric test to determine the differences in changes over time (Pallant, 2013). The P-Values were used to determine if there were statistically significant improvements. The significant level is  $< 0.05$ :

- $P < 0.05$ : there is a significant difference in the means (accepted hypothesis)
- $P > 0.05$ : there is no significant difference in the means (rejected hypothesis).

If there were no changes in the Friedman test results then Wilcoxon signed rank test results weren't presented.

- Wilcoxon signed ranked test

Is a non-parametric test that determines at which point in time changes occur. The Bonferroni adjustment involves dividing the alpha level by the amount of tests that were used and then using the revised alpha level as a criterion to determine if there was a significant difference (Pallant; 2013). The Bonferroni adjustment is known to be rather conservative / strict. The Bonferroni adjustment was used by indicating a P value of  $< 0.025$ , which was calculated by dividing the P value of 0.05 by a two month interval period ( $0.05 \div 2 = 0.025$ ). This demonstrated a significant difference in time, at which point changes had occurred (month 1 or month 2) (Van Staden, 2014).

Abbreviations that were used followed that of Komar's (2005) study and Patel's (2010) study on the effect of the simillimum on PMS respectively:

- Statistically significant **decreases** in symptoms were presented in **bold**. This means that it is an **accepted hypothesis**.
- Statistically significant *increases* in symptoms were presented in *italics*. This means that it is a *rejected hypothesis*.

### 5.1.3 Statistical analysis of combined results

The severity scores per participant were added up (for nine premenstrual symptoms that the participant may have presented with) for each day 14 days before menstruation. The data was recorded and used for statistical analysis for each participant as well as the total overall progress for all ten participants in the two months of treatment.

The progress of each participant as well as the overall total progress of all participants were done at the end of the cases, over the two month period and were represented graphically.



## 5.2 RESULTS OF ALL PARTICIPANTS

### 5.2.1 Results of single symptoms

#### 5.2.1.1 Irritability

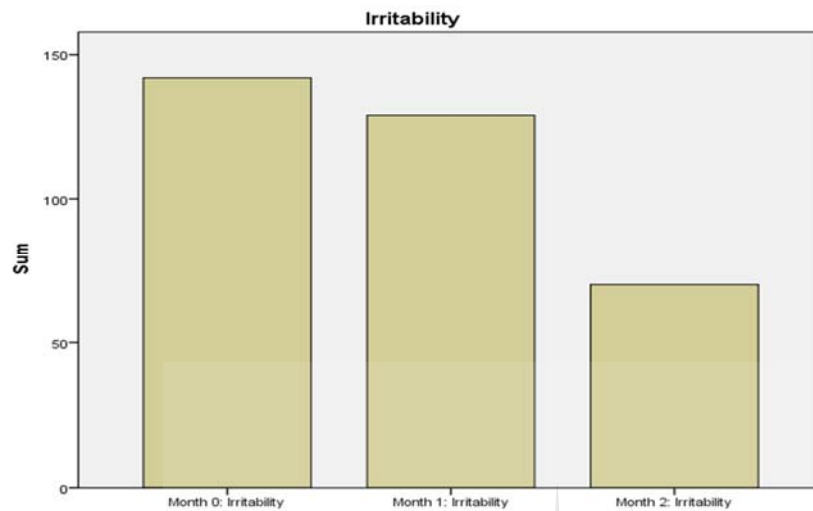


Figure 5.2.1.1 Graph illustrating the sum of results for all the participants that experienced irritability fourteen days before menstruation over the three month research period

Table 5.1: Friedman test results for irritability

#### Test Statistics

|             |        |
|-------------|--------|
| N           | 140    |
| Chi-Square  | 16.539 |
| Df          | 2      |
| Asymp. Sig. | .000   |

The above table demonstrates that the P value was 0.000 ( $< 0.05$ ) which shows that there was a statistically significant **decrease** in irritability over the 2 month treatment period.

Table 5.2: Wilcoxon signed ranked test results for irritability

Test Statistics

|                        |   |   |
|------------------------|---|---|
|                        | M1_IRR Month 1:<br>Irritability - M0_IRR<br>Month 0: Irritability | M2_IRR Month 2:<br>Irritability - M0_IRR<br>Month 0: Irritability |
| Z                      | -1.011 <sup>b</sup>   | -4.037 <sup>b</sup>   |
| Asymp. Sig. (2-tailed) | .312  | .000  |

The above table demonstrates that the P value from month 0 to month 1 was 0.312 which is > 0.025 therefore there was non-significant decrease in symptoms in this period. From month 0 to month 2 the P value is 0.000 (< 0.025) which illustrates that there was a statistically significant **decrease** in all participants that recorded irritability during the premenstrual phase of the menstrual cycle as treatment progressed.

5.2.1.2 Depression

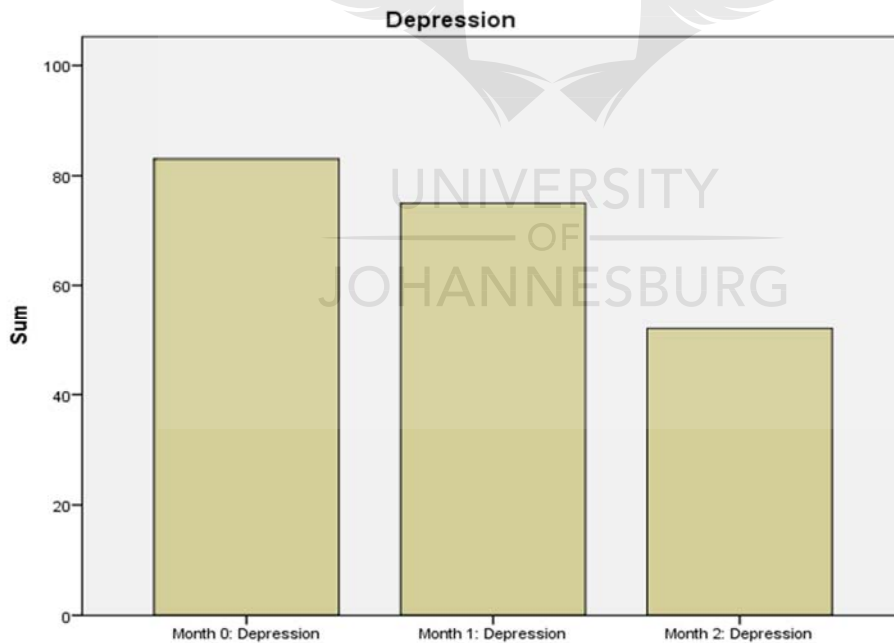


Figure 5.2.1.2 Graph illustrating the sum of results for all the participants that experienced depression fourteen days before menstruation over the three month research period

Table 5.3: Friedman test results for depression

Test Statistics

|             |             |
|-------------|-------------|
| N           | 140         |
| Chi-Square  | 6.853       |
| Df          | 2           |
| Asymp. Sig. | <b>.033</b> |

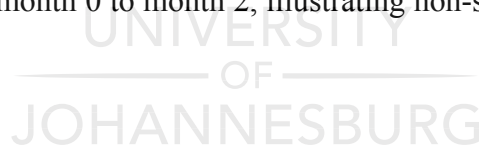
The above table demonstrates that the P value was 0.033 ( $< 0.05$ ) which shows that there was a statistically significant **decrease** in depression over the 2 month treatment period.

Table 5.4: Wilcoxon signed ranked test results for depression

Test Statistics

|                        |                                 |                                 |
|------------------------|---------------------------------|---------------------------------|
|                        | M1_DEP Month 1:<br>Depression - | M2_DEP Month 2:<br>Depression - |
|                        | M0_DEP Month 0:<br>Depression   | M0_DEP Month 0:<br>Depression   |
| Z                      | -.191 <sup>b</sup>              | -2.117 <sup>b</sup>             |
| Asymp. Sig. (2-tailed) | .849                            | .034                            |

The above table demonstrates a P value of 0.849 ( $> 0.025$ ) from month 0 to month 1, and a P value of 0.034 ( $> 0.025$ ) from month 0 to month 2, illustrating non-significant decrease in both months respectively.



### 5.2.1.3 Anxiety

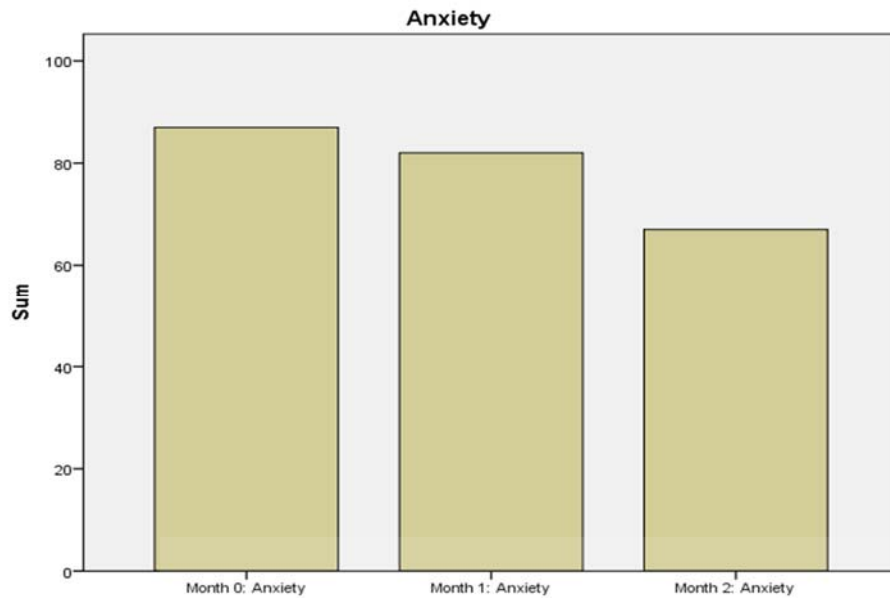


Figure 5.2.1.3 Graph illustrating the sum of results of all the participants that experienced anxiety fourteen days before menstruation over the three month research period

Table 5.5: Friedman test results for anxiety

#### Test Statistics

|             |       |
|-------------|-------|
| N           | 140   |
| Chi-Square  | 1.016 |
| Df          | 2     |
| Asymp. Sig. | .602  |

The above table demonstrates that the P value was 0.602 ( $> 0.05$ ) which shows that there was a non-significant decrease in anxiety over the 2 month treatment period.

### 5.2.1.4 Breast swelling

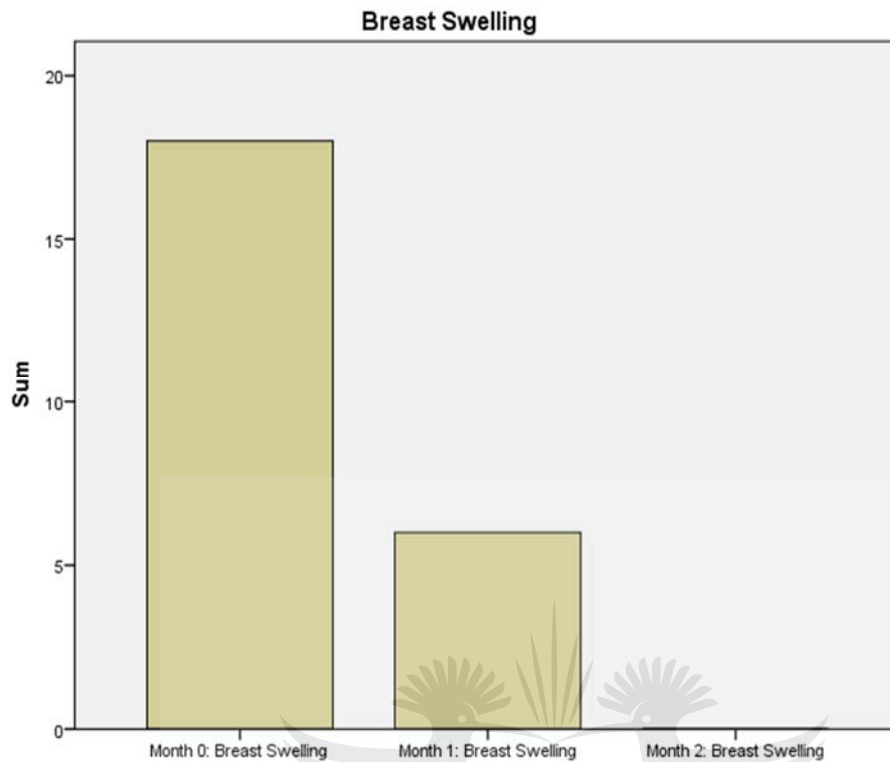


Figure 5.2.1.4 Graph illustrating the sum of results for all the participants that experienced breast swelling fourteen days before menstruation over the three month research period

Table 5.6: Friedman test results for breast swelling

| Test Statistics |             |
|-----------------|-------------|
| N               | 140         |
| Chi-Square      | 11.200      |
| Df              | 2           |
| Asymp. Sig.     | <b>.004</b> |

The above table demonstrates that the P value was 0.004 ( $< 0.05$ ) which shows that there was a statistically significant **decrease** in breast swelling over the 2 month treatment period.

Table 5.7: Wilcoxon signed ranked test results for breast swelling

Test Statistics

|                        |  |  |
|------------------------|--|--|
|                        | M1_BS Month 1:<br>Breast Swelling -<br>M0_BS Month 0:<br>Breast Swelling | M2_BS Month 2:<br>Breast Swelling -<br>M0_BS Month 0:<br>Breast Swelling |
| Z                      | -2.264 <sup>b</sup>  | -2.214 <sup>b</sup>  |
| Asymp. Sig. (2-tailed) | .024   | .027   |

The above table demonstrates that the P value was 0.024 ( $< 0.025$ ) for month 0 to month 1, illustrating there was a statistically significant **decrease** in participants that recorded breast swelling. From month 0 to month 2 the P value was 0.027 ( $> 0.025$ ) indicating there was a non-significant decrease in breast swelling.

5.2.1.5 Breast tenderness

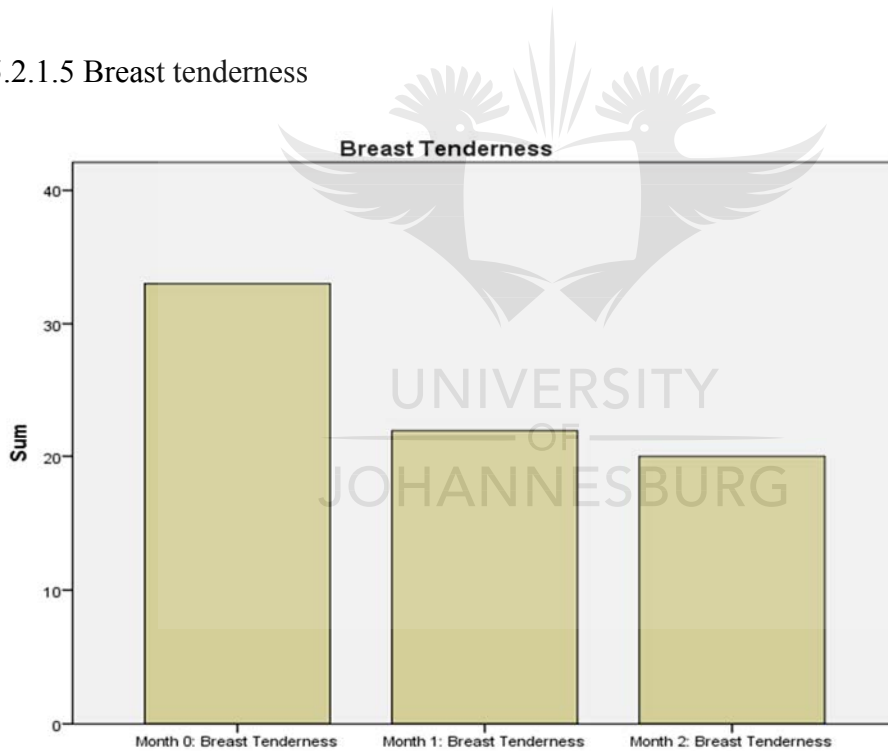


Figure 5.2.1.5 Graph illustrating the sum of results for all the participants that experienced breast tenderness fourteen days before menstruation over the three month research period.



Table 5.8: Friedman test results for breast tenderness

| Test Statistics |       |
|-----------------|-------|
| N               | 140   |
| Chi-Square      | 2.041 |
| Df              | 2     |
| Asymp. Sig.     | .360  |

The above table demonstrates that the P value was 0.360 ( $> 0.05$ ) which shows that there was a non-significant decrease in breast tenderness over the 2 month treatment period.

#### 5.2.1.6 Abdominal bloating

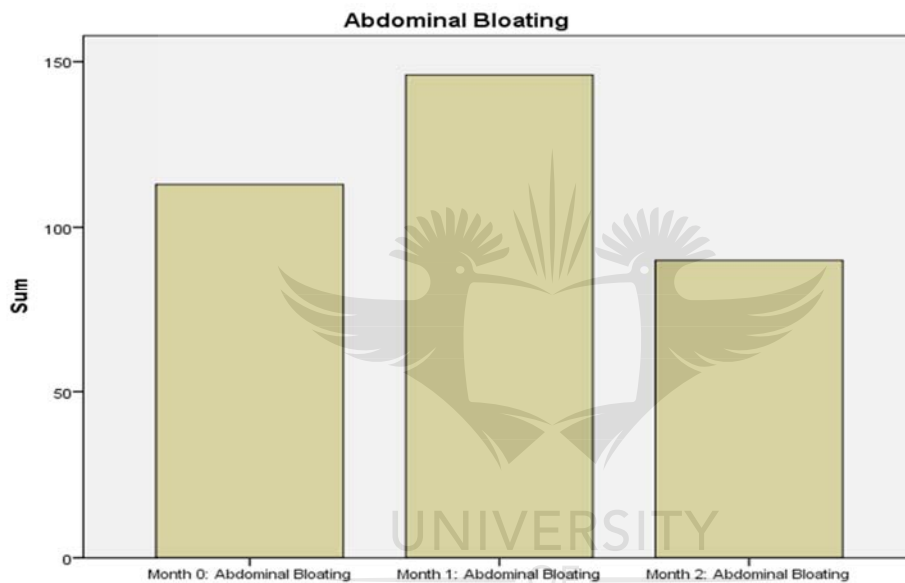


Figure 5.2.1.6 Graph illustrating the sum of results for all the participants that experienced abdominal bloating fourteen days before menstruation over the three month research period

Table 5.8: Friedman test results for abdominal bloating

| Test Statistics |       |
|-----------------|-------|
| N               | 140   |
| Chi-Square      | 5.679 |
| Df              | 2     |
| Asymp. Sig.     | .058  |

The above table demonstrates that the P value was 0.058 ( $> 0.05$ ) which shows that there was no statistically significant difference in abdominal bloating over the 2 month treatment period.

### 5.2.1.7 Headache

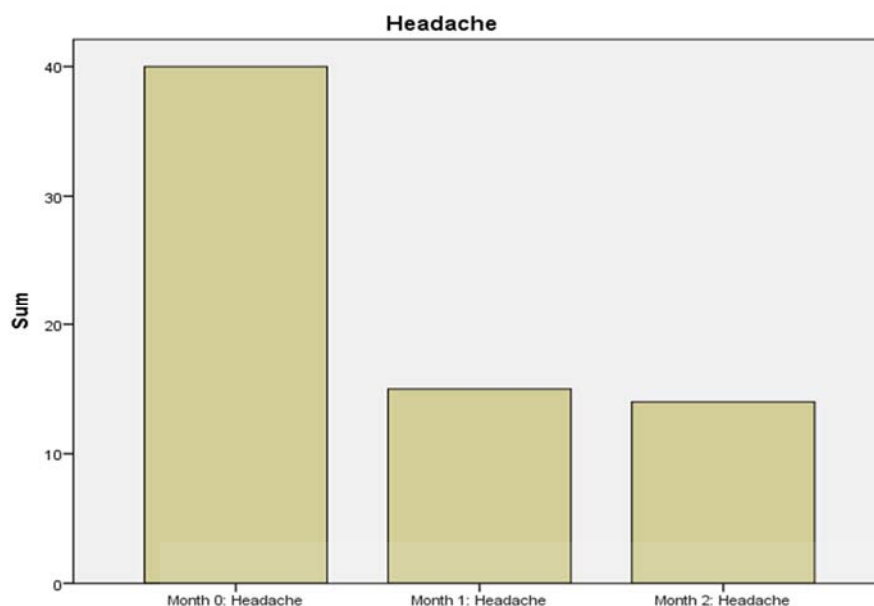


Figure 5.2.1.7 Graph illustrating the sum of results for all the participants that experienced headaches fourteen days before menstruation over the three month research period

Table 5.10: Friedman test results for headache

| Test Statistics |             |
|-----------------|-------------|
| N               | 140         |
| Chi-Square      | 8.699       |
| Df              | 2           |
| Asymp. Sig.     | <b>.013</b> |

The table above demonstrates that the P value was 0.013 ( $< 0.05$ ), which shows that there was a statistically significant **decrease** in headaches over the 2 month treatment period.

Table 5.11: Wilcoxon signed ranked test results for headache

| Test Statistics        |   |   |
|------------------------|---|---|
|                        | M1_HA Month 1:<br>Headache - M0_HA<br>Month 0: Headache | M2_HA Month 2:<br>Headache - M0_HA<br>Month 0: Headache |
| Z                      | -2.349 <sup>b</sup>                                     | -2.405 <sup>b</sup>                                     |
| Asymp. Sig. (2-tailed) | .019  | .016  |

The above table shows the P value 0.019 ( $< 0.025$ ) from month 0 to month 1, and the P value 0.016 ( $< 0.025$ ) from month 0 to month 2. This illustrates a statistically significant **decrease** in

participants that recorded headaches during the premenstrual phase of the menstrual cycle for both time periods.

### 5.2.1.8 Food cravings

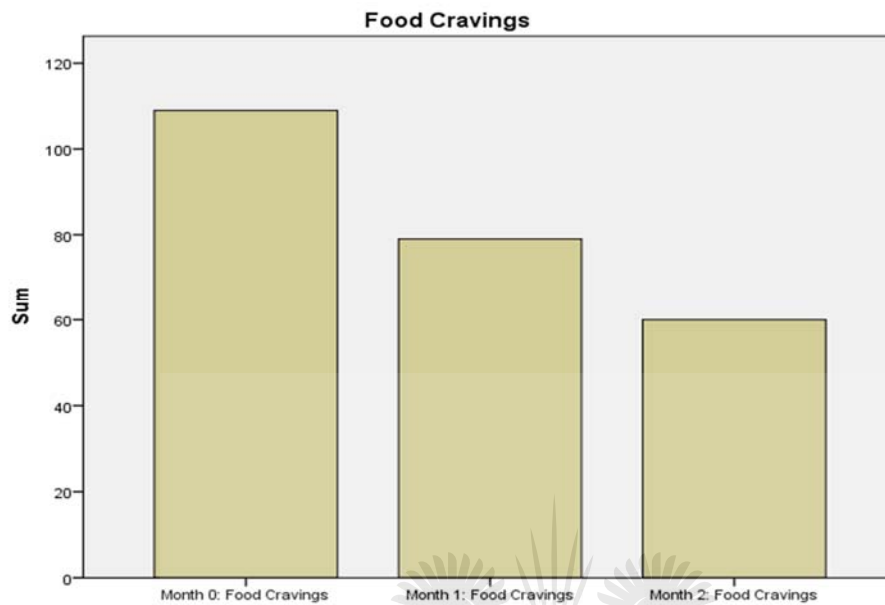


Figure 5.2.1.8 Graph illustrating the sum of results for all the participants that experienced food cravings fourteen days before menstruation over the three month research period

Table 5.1.2: Friedman test results for food cravings

| Test Statistics |             |
|-----------------|-------------|
| N               | 140         |
| Chi-Square      | 11.165      |
| Df              | 2           |
| Asymp. Sig.     | <b>.004</b> |

The above table demonstrates that the P value was 0.004 ( $< 0.05$ ) which shows that there was a statistically significant **decrease** in food cravings over the 2 month treatment period.

Table 5.13: Wilcoxon signed ranked test results for food cravings

Test Statistics

|                        |  |  |
|------------------------|--|--|
|                        | M1_FC Month 1:<br>Food Cravings -<br>M0_FC Month 0:<br>Food Cravings | M2_FC Month 2:<br>Food Cravings -<br>M0_FC Month 0:<br>Food Cravings |
| Z                      | -2.749 <sup>b</sup>  | -3.328 <sup>b</sup>  |
| Asymp. Sig. (2-tailed) | <b>.006</b>  | <b>.001</b>  |

The above table demonstrates that the P value was 0.006 (< 0.025) from month 0 to month 1 and the P value was 0.001 (<0.025) from month 0 to month 2, illustrating a statistically significant **decrease** in participants that recorded food cravings during the premenstrual phase of the menstrual cycle in both time periods.

5.2.1.9 Swelling of extremities

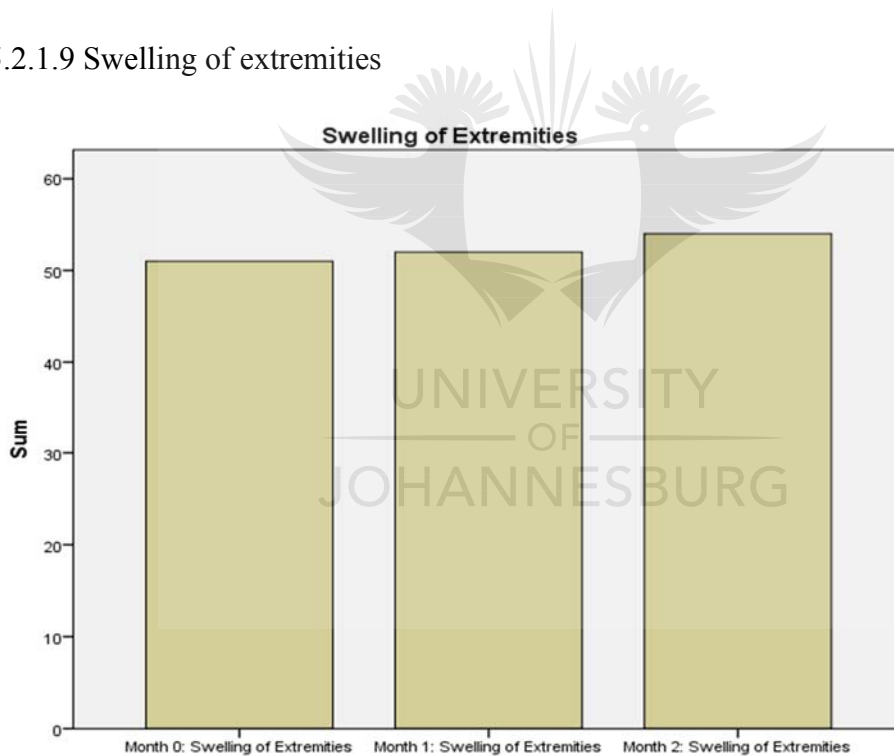


Figure 5.2.1.9 Graph illustrating the sum of results for all the participants that experienced swelling of extremities fourteen days before menstruation over the three month research period

*Table 5.14: Friedman test results for swelling of extremities*

Test Statistics

|             |       |
|-------------|-------|
| N           | 140   |
| Chi-Square  | 5.268 |
| Df          | 2     |
| Asymp. Sig. | .072  |

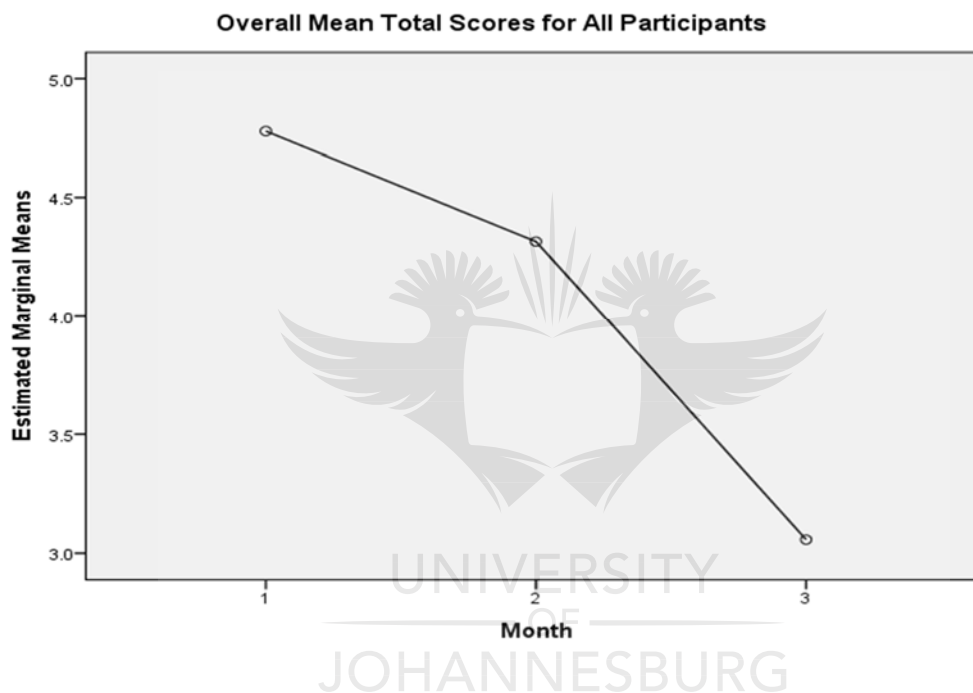
The above table demonstrates that the P value was 0.072 ( $> 0.05$ ) which shows that there was non-significant increase in swelling of the extremities over the 2 month treatment period.



## 5.3 OVERVIEW AND DISCUSSION FOR ALL PARTICIPANTS

### 5.3.1 Overall mean total scores for all participants after two months of treatment

From the figures 5.3.1.1 a and 5.3.1.2 b below it can be deduced that there was a statistically significant decrease in the overall mean total score for symptoms of PMS during the premenstrual phase of the menstrual cycle during month 2 of treatment compared to month 1 of treatment.



*Figure 5.3.1.1 a. The overall mean total scores for all participants after the three month study period*

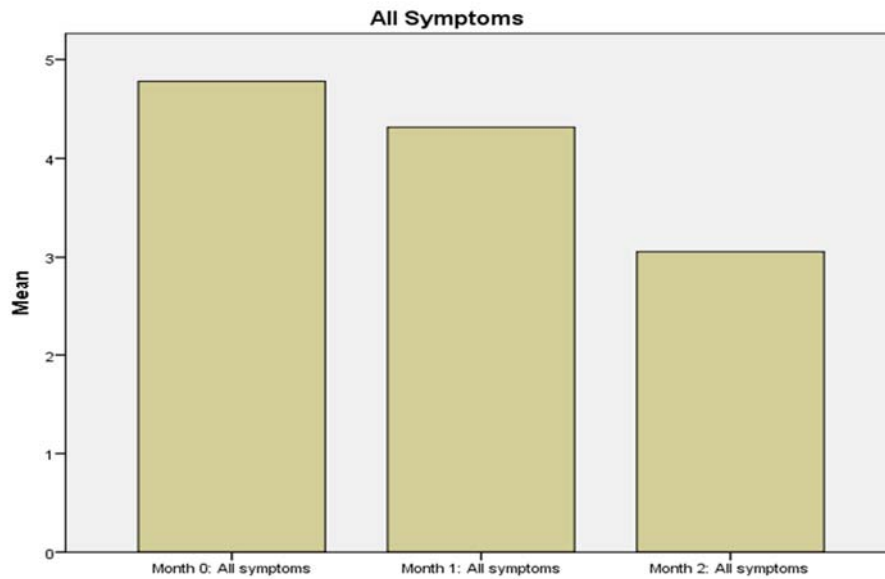


Figure 5.3.1.1 b. Graph illustrating the overall mean total scores for all symptoms after the three month study period

Table 5.15: Friedman test results for the overall mean total score for all symptoms over time from month 0 – month 2

Test Statistics

|             |             |
|-------------|-------------|
| N           | 140         |
| Chi-Square  | 12.139      |
| Df          | 2           |
| Asymp. Sig. | <b>.002</b> |

The above table demonstrates that the P value was 0.002 ( $< 0.05$ ) which shows that there was a statistically significant **decrease** in the overall mean total score for all symptoms over the 2 month treatment period.

Table 5.16: Wilcoxon signed ranked test results for the overall mean total score for all symptoms

Test Statistics

|                        | M1_TOTAL Month 1: All symptoms - MO_TOTAL Month 0: All symptoms | M2_TOTAL Month 2: All symptoms - MO_TOTAL Month 0: All symptoms |
|------------------------|---|---|
| Z                      | -.499 <sup>b</sup>  | -3.613 <sup>b</sup>   |
| Asymp. Sig. (2-tailed) | .618  | .000  |

The above table demonstrates that the P value was 0.618 ( $> 0.025$ ) from month 0 to month 1 which is statistically non-significant decrease. During month 0 to month 2 the P value was 0.000 ( $< 0.025$ ) illustrating a statistically significant **decrease** in the participants overall mean total score for all PMS symptoms during this timeframe of the study.





## 5.4 Summary

The homeopathic simillimum was significantly effective in improving specific symptoms from month 0 to month 2; as can be seen in the statistically significant decrease presented by  $P < 0.05$ .

*Table 5.17: P values over the 2 month treatment period using Friedman test results*

| Symptom         | P – Value ( < 0.05) |
|-----------------|---------------------|
| Irritability    | 0.000               |
| Depression      | 0.033               |
| Breast swelling | 0.004               |
| Headaches       | 0.013               |
| Food cravings   | 0.004               |

However there was a non-significant increase / decrease in the following symptoms (using the Friedman test results).

*Table 5.18: P values over the 2 month treatment period using Friedman test results*

| Symptom                 | P – Value ( > 0.05) | Increase<br>/<br>Decrease |
|-------------------------|---------------------|---------------------------|
| Anxiety                 | 0.602               | ↓                         |
| Breast tenderness       | 0.360               | ↓                         |
| Abdominal bloating      | 0.058               | ↓                         |
| Swelling of extremities | 0.072               | ↑                         |

The following may be the reason why there were no statistically significant improvements in the above symptoms:

- The time at which the study was done was between the months of August and December. This was a very stressful period for many of the participants. Many of them were in stressful professions such as educators or had exams such as the students. This could have had an effect on their anxiety levels.
- The study treatment period was only 2 months. This time frame might have been too short to notice a statistically significant effect of the homeopathic remedies on PMS symptoms. Certain participants only started seeing improvements after month 2 of treatment and a longer time period could have produced better results.
- The frequency or potency of the homeopathic remedy may have not been prescribed often enough.
- There might have been a need to re-evaluate certain cases and change the homeopathic remedy.
- Abdominal bloating and swelling of extremities could be caused by diet and lifestyle factors and not only PMS.

## CHAPTER 6

### CONCLUSIONS AND RECOMMENDATIONS

#### 6.1 CONCLUSIONS

The aim of this descriptive study was to determine the efficacy of individualised homeopathic treatment in Indian females that were suffering with symptoms of premenstrual syndrome by means of a PMS chart, using the case studies which were analysed and described over time. There were initially 14 participants recruited but only ten participants met the selection criteria and completed the study.

The homeopathic simillimum was statistically significant in reducing the following premenstrual symptoms: irritability (0.000), depression (0.033), breast swelling (0.004), headaches (0.013) and food cravings (0.004) over the two month treatment period.

The homeopathic simillimum showed no improvement in the following premenstrual symptoms: anxiety (0.602), breast tenderness (0.360), abdominal bloating (0.058) and swelling of extremities (0.072) over the 2 month treatment period.

#### 6.2 RECOMMENDATIONS

During this study, a few problems were experienced when the homeopathic simillimum was prescribed which might have produced poor results. In order to prevent these problems it is recommended that in future studies:

- The potency and frequency of the remedy could be reevaluated and increased or decreased in accordance to the principles of homeopathic prescribing depending on the participant's symptoms. In some cases the potency could have been too low and yield poor results.
- If only a few symptoms had improved and the remedy no longer seemed well indicated then the case should have been reevaluated.
- The study should be conducted at the beginning of the year, to avoid stressful periods such as exams.
- A larger sample group should be considered in order to yield better results statistically.
- A longer study period should be used as simillimum studies are usually conducted over several months in order to yield better results and observe changes over a longer period of time.

- A study to compare the effects of diet and lifestyle on PMS would be useful and could be part of a comparison with the efficacy of homeopathic treatment.

Together with Komar (2005), Patel (2010) and Mainganye (2011) the following recommendations can be followed to improve subsequent research:

- A larger sample group should be considered as this could yield better results.
- A double blinded study comparing individual homeopathic treatment and placebo group would be useful in order to compare the results of participants receiving placebo versus those that are receiving the homeopathic treatment.
- A study comparing homeopathic simillimum treatment to a complex homeopathic remedy, to compare each person's response to different methods of homeopathic prescribing.
- If the remedy seems well indicated it should not be changed because the patient may be close to cure and the wait and watch approach should be used if necessary.
- The frequency and dosage should not be changed with haste and a wait and watch approach should be used if necessary.

### 6.3 BENEFITS OF THIS STUDY

This study has the following benefits together with Komar (2005), Patel (2010) and Mainganye (2011):

- Homeopathy is a safe, non-invasive and cost effective treatment option for females that are suffering with PMS.
- When homeopathic remedies are prescribed in the correct manner they have no side effects compared to conventional medication.
- The case studies can be used in the future by students as a learning tool for *Materia Medica* and clinical homeopathy.
- The study could be used to contribute to medical as well as homeopathic knowledge and aid in the management of females suffering with PMS.

## 6.4 LIMITATIONS OF THIS STUDY

The following limitations were acknowledged:

- The participant's ability to take medication, record and report symptoms accurately might have been limited.
- In certain cases the choice of potency and frequency of the homeopathic simillimum could have been incorrect and yielded poor results.
- The efficacy of the PMS chart was based on the truthfulness of each participant.
- Participants were not asked to rate their general well-being. This could have assisted in showing overall improvement from homeopathic remedies. Most participants' general well-being might have been affected by external factors.
- Due to the fact that there was no placebo group in this study, positive results that were presented could have been due to the placebo effect and not the homeopathic simillimum alone.
- The study period was rather short and certain participants required being on the remedy for a longer period of time in order to observe statistically significant effects of the homeopathic simillimum.
- The non-parametric tests are inherently less powerful when used on a small sample group and this could affect results.

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## APPENDIX A



# ATTENTION LADIES!

Is that time of the month getting you down?

# PMS

Are you Indian and between 18-40 years? Do you experience any of the following symptoms before your period?

- Depression
- Anxiety
- Irritability
- Breast tenderness or swelling
- Abdominal bloating
- Headaches
- Swelling of extremities
- Food cravings

If **YES**, you may qualify to participate in a **Homeopathic Research Study**: on the effect of Homeopathic treatment in Indian females with PMS.

Participation in this study is voluntary, strictly confidential and safe.

Ethical Clearance Number: AEC01-59-2014

Please contact me for more information Maseeha Bulbulia **084 627 8900**

## **APPENDIX B**

### **PARTICIPANT INFORMATION AND CONSENT FORM**

Dear Prospective Participant,

My name is Maseeha Bulbulia, I am a final year Homoeopathy student conducting a research study as partial fulfillment for my M. Tech (Homoeopathy) at the University of Johannesburg. The purpose of the study is to determine the effect of individualised homeopathic treatment on South African Indian females using observational studies.

Premenstrual syndrome (PMS) is a group of mild to severe symptoms that are both physical and emotional. The symptoms of PMS are often severe and can affect normal daily living. Symptoms of PMS include breast tenderness, abdominal bloating, headaches, swelling of hands and feet, depression, angry outbursts, irritability, anxiety, confusion and social withdrawal. The symptoms usually resolve in a few days on the onset of the period.

Homeopathy may be a safe and effective way to treat illness, and to improve health. Homeopathic remedies are derived from plants, minerals or animals for the purpose of stimulating a natural healing response. A homeopathic simillimum is a remedy that is chosen for each individual and aims to treat each person individually on a mental, emotional and the physical level.

The aim of this study is to determine the efficacy of individualised homeopathic treatment on South African Indian females that are suffering with symptoms of premenstrual syndrome using observational studies.

You are warmly invited to participate in the study if you are:

- Between the ages of 18-40 and experiencing PMS on a monthly basis;
- Experiencing an increase in at least one of the following mental and physical symptoms at least fourteen days before your period begins, in each of your three previous menstrual cycles.
  - Mental symptoms - irritability, depression or anxiety
  - Physical symptoms - breast tenderness or swelling, abdominal bloating, headache, swelling of extremities or food cravings



- You should also have an improvement of the above symptoms within three days of the onset of menses and the symptoms should not reoccur until at least day thirteen of your cycle.

Unfortunately you will not be able to participate if you are:

- Experiencing irregular menstrual cycles
- Lactating
- Suffering from pre-diagnosed anxiety and depression
- Using sex hormones except the oral contraceptive (must have been used for a minimum of 3 months)
- Using concomitant psychotherapies and alternate therapies for PMS and/or
- Pregnancy

As a participant in this study you will be requested not to make use of any homeopathic, herbal supplementation, acupuncture etc. for the treatment of PMS while you are participating in this study. If you are using any conventional medication or if there have been any changes in your dosage or brand of your oral contraceptive kindly document this in the questionnaire. Should you not qualify to participate in this study but require further medical care, you will be referred for treatment.

This is a 12 week study which will be conducted at the Homeopathic Health Training Centre on the University of Johannesburg Doornfontein Campus. You will be required to attend four consultations four weeks apart. Follow-up consultations will be held after 4 weeks, 8 weeks and the end of week 12.

At the beginning of this study (week 0) you will be requested to sign this Participant Information and Consent Form. A full case history will be taken using a standard Homeopathic case taking form and relevant physical exams will be conducted. The first month will be used as a baseline and you will therefore only receive treatment during your second menstrual cycle however you will be required to carefully monitor your symptoms and record your daily symptoms on a PMS chart every day for 12 weeks. The PMS chart grades your PMS symptoms on a scale of 0 – 5.

Before each follow-up consultation you will be reminded of your next appointment via email or text message. At your follow-up consultations you will need to bring your PMS chart which will be collected. The follow-up consultations will include a case taking and relevant physical

examination. You will be treated using the homeopathic remedy during the second menstrual cycle; this remedy may or may not be repeated, or a new remedy may be prescribed during your third cycle depending on your symptoms. Your final consultation will take place at the end of week 12 where the PMS chart will be collected once again and no remedy will be given to you.

Participation in this study is voluntary and your rights to privacy and confidentiality will be protected as the consultations will take place in a private setting. Anonymity will be maintained by replacing your name with an allocated case number. Your personal details will not be disclosed; all information collected will be under lock and key and will be kept in the safe premises of the strong room of the Homeopathic Health Training Center. You are free to withdraw from the study at any time without any risk or consequence.

Homeopathy is considered to be a safe method of treatment and there are no risks anticipated however during the study if any risks do occur or if you have any questions you are requested to report to the researcher or supervisors as soon as possible for evaluation in order to be referred to a healthcare provider if necessary

A signed copy of this consent form will be made available to you and the results of the study will be made available to you (if you so wish) upon its completion.

The possible benefit of participating in this study may show that individualised homeopathic treatment is effective in the improvement of PMS. The outcome of this study will therefore contribute to the body of knowledge and will allow for further research to be conducted in order to compare different racial groups.

Thank you

Maseeha Bulbulia

## CONSENT

I the participant read the above and have been informed about the details of the study. I understand the associated risks and benefits. I have also asked questions about anything that I need to know in relation to the research, the researcher has answered any questions that I may have had. I agree to participate in the research. I understand that I have the right to withdraw at any time.

Participant's signature: \_\_\_\_\_ Date: \_\_\_\_\_

I the researcher have fully explained the methodology, aim, type of treatment of the study to the participant. I have also asked if the participant has any questions relating to any part of this study and have answered them to the best of my ability.

Researcher signature: \_\_\_\_\_ Date: \_\_\_\_\_

Contact details

Researcher: Maseeha Bulbulia cell number 084 627 8900

Supervisor: Dr R. Patel office number 011 559 6780

Co-Supervisor: Dr K. Peck cell number 082 824 2280



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**APPENDIX C**

**Selection Questionnaire**

**Case number:** \_\_\_\_\_ **Age:** \_\_\_\_\_ **Date:** \_\_\_\_\_

**Pregnant: YES/ NO**

**Lactating: YES/ NO**

**Alcohol dependent: YES/ NO**

**Drug dependent: YES/ NO**

**Do you have any psychiatric condition? Please specify**

**Oral contraceptive or any other hormonal treatment: YES/NO**

**Medication: YES/ NO**

**Psychotherapy: YES/ NO**

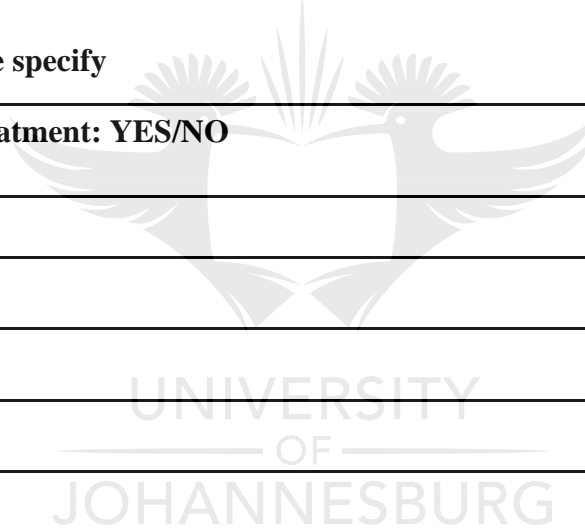
**Herbal supplements: YES/NO**

**Homeopathic remedies: YES/ NO**

**Acupuncture: YES/ NO**

**Reflexology: YES/ NO**

**Therapeutic massage: YES/ NO**



**Other alternate treatments: YES/ NO**

**Please specify:**

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**Do you have any of the following?**

**Amenorrhoea: YES/ NO**

**Menorrhagia: YES/ NO**

**Metrorrhagia: YES/ NO**

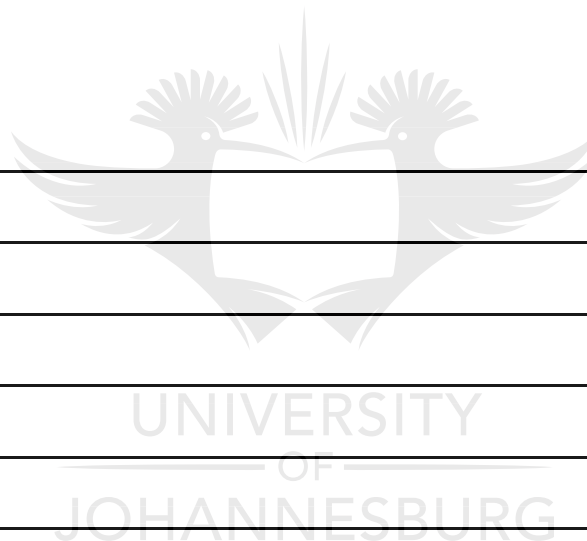
**Severe dysmenorrhoea: YES/ NO**

**Foul brown leucorrhoea: YES/NO**

**Pain during intercourse: YES/ NO**

**Any lumps or sores: YES/ NO**

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**APPENDIX C continued....**

**Please tick or specify number of days in appropriate boxes:**

| <b>Symptoms</b>                | <b>Symptoms before periods</b> | <b>Number of days before periods</b> | <b>Symptoms that improve with start of period</b> | <b>Number of days symptoms last after day 1 of menses</b> | <b>Symptoms experienced in each of the 3 prior periods</b> |
|--------------------------------|--------------------------------|--------------------------------------|---|---|--|
| <b>Irritability</b>            |                                |                                      |   |   |  |
| <b>Depression</b>              |                                |                                      |   |   |  |
| <b>Anxiety</b>                 |                                |                                      |   |   |  |
| <b>Breast swelling</b>         |                                |                                      |   |   |  |
| <b>Breast tenderness</b>       |                                |                                      |   |   |  |
| <b>Abdominal bloating</b>      |                                |                                      |   |   |  |
| <b>Headache</b>                |                                |                                      |   |   |  |
| <b>Food craving</b>            |                                |                                      |   |   |  |
| <b>Swelling of extremities</b> |                                |                                      |   |   |  |
| <b>Other</b>                   |                                |                                      |   |   |  |











## **\APPENDIX F**

### **HOW TO TAKE AND STORE HOMOEOPATHIC REMEDIES**

#### **HOW TO STORE HOMOEOPATHIC REMEDIES**

Storage of Homeopathic remedies

- Store remedies in a cool, dry place below 25°C out of direct sunlight
- Store remedies out of reach of children, microwaves, electrical charging points.
- Once the remedy is taken ensure that the lid is closed immediately in order to prevent contamination.
- If the container breaks or the contents that is within the container spill do not return the contents into the container rather discard it and ask for a new remedy.

#### **HOW TO TAKE HOMOEOPATHIC REMEDIES**

- Allow a 15 minute time period between eating/drinking or brushing your teeth and administration of the homeopathic remedy.
- Try to avoid strong odours/flavours (such as Camphor or Coffee) immediately before or after taking your remedy (again, allow approximately a 15 minute gap).
- Homeopathic remedies are usually administered, orally, under the tongue.

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