A group analysis evaluation of selected synthetic recreational drug isolate remedies in terms of known materia medica

By

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DEDICATION

This dissertation is dedicated to Prem Rawat, without whom anything in my life would not be possible.

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I would like to thank my family, especially my parents and sister who have supported me throughout this process and in my life.

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ABSTRACT

The addition of a large number of new remedies to the homoeopathic materia medica has made it challenging to select the correct remedy for a patient. Locating individual remedies within groups makes it easier to understand, remember and apply the information from the remedies.

The aim of this research study was to evaluate common themes and symptomatology of homoeopathic remedies belonging to the synthetic recreational drug isolate group, as represented in the known homoeopathic materia medica and repertory. Most remedies derived from synthetic recreational drug isolate sources have not been well documented or comprehensively proven in homoeopathy, so are not well represented in repertory programs. Therefore, in addition, remedies in this study were selected according to the homoeopathic significance of each remedy, the availability of actual provings and representation in materia medica, the existence of a synthetic derivative of the drug, and if the drug was commonly used.

The selected remedies were then subjected to a manual rubric extraction process in which common rubrics were extracted. The common rubrics were analyzed to determine common sensations within the group. The extracted sensations were then defined using *a* dictionary and synonyms were determined using *a* thesaurus. Each sensation was subjected to a literature search to test its validity. Second and third order analyses were performed based on the results.

The most common sensations found as a result of this process were: dryness, itching, fear, anger, restlessness, anxiety, indifference, heaviness, heat, acute and weakness.

The active and passive reactions and compensations of the synthetic recreational drug isolate group were also analyzed. The active reactions included anger, rage, acute, violence, impatience and irritation. Passive reactions were heaviness, numbness,

dullness, faintness, weakness and coldness. The compensatory reaction included sensations of ecstasy, elation and euphoria or tranquillity.

Each remedy was classified into specific miasms based on Sankaran's miasmatic model (Sankaran, 1997). Each remedy was categorized as a particular miasm if the literature showed a clear predominance of the themes associated with that miasm. Many of the remedies had features of the AIDS, Cancer, Sycotic and Tubercular miasms.

Pathological tendencies of the synthetic recreational drug isolate group involved the throat, eyes, stomach, nervous system, male genitalia and sleep patterns. Clinically, the remedies can be used in cases of mental disorders such as psychosis and schizophrenia, chronic fatigue, visual and sleeping disorders, anorexia nervosa and neurological disorders such as chorea, tremors and formication.

The results of this study appear to confirm the application of the group analysis methodology as outlined by Sankaran (2002). The results also add depth to the existing literature on synthetic recreational drug isolate remedies.

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CHAPTER 1 INTRODUCTION

New species in nature are being discovered every day, and therefore, there has been a need to classify species so that their similarities and differences and can be recognized. Similarly, there are thousands of remedies in homoeopathy and our materia medica is constantly being expanded with new remedies. As a result, a system of homoeopathic classification is required to help practitioners both study the remedies, and prescribe more accurately for each individual (Sankaran, 2005b).

In the past, most remedies were studied in isolation without knowledge of the origin of the remedy (Scholten, 1993:23). Remedies began to be classified according to their natural order, miasmatic theory, the doctrine of signatures and the repertory to assist in selection of the correct remedy (Gaier, 1991).

Over the past two decades the quest for profound insight into remedies has led to meaningful new systems being developed in order to understand and classify groups of remedies (Ihrig, 2012). This system is called group analysis (analytical methodology). The aim of group analysis is to identify a mechanism so as to understand groups of related remedies through their common symptomatology (Scholten, 1993:23).

Homoeopaths like Rajan Sankaran, Jan Scholten and Massimo Mangialavori have analyzed groups of related remedies. Sankaran developed the sensation and kingdom classification method, while Scholten devised a periodic classification system (Ihrig, 2012). Mangialavori has a multi-system approach which encompasses fields such as anthropology, folk medicine, physiology, biochemistry, toxicology, classical homoeopathy, and clinical medicine. His view is that understanding remedies is an

ongoing process of integrating data from various sources, and not just relying on information from only provings or homoeopathic materia medica etc. (Moskowitz, 2012).

Application of group analysis allows under-represented and poorly-understood remedies to have a clearer and deeper representation in the homoeopathic materia medica. If this method is correctly understood and applied, it can make the practice of homoeopathy and prescribing more certain and simple (Sankaran, 2005b).

There is a new trend to prescribe remedies that are not well represented in the traditional homoeopathic literature such as repertories and homoeopathic materia medicas. These remedies are referred to as being minor or small remedies, as they are poorly represented in homoeopathic literature and are understood to have a small site of application. Hence, they are often neglected and are not often prescribed. However, with the virtue of new methods discovered by Jan Scholten, Massimo Mangialavori and Rajan Sankaran, it has led to small or minor remedies being more often prescribed. Practitioners therefore do not only have to rely on prescribing the well represented or the traditional larger (polychrest) remedies.

Previously, well known 'drug' remedies in homoeopathy were mostly derived from different botanical families such as *Cannabis indica* and *Coffea cruda* (Sankaran, 2002:290). However, with the increased usage of synthetic recreational drugs in the world, the amount of 'drug' remedies being added to the system of homoeopathy has been escalating. Synthetic recreational drug isolate remedies are a relatively small and new group in homoeopathy, with minimal information on each synthetic recreational drug isolate remedy being available. Application of Sankaran's method provides an understanding of the themes common to this group, and the information from this group analysis can be contributed to the homoeopathic literature.

1.1 Aim of the study

This study aimed to extract and evaluate the common themes and symptomatology that manifest in homoeopathic remedies belonging to the synthetic recreational drug isolate group, as represented in the known homoeopathic materia medica and repertory. This was executed by analyzing the synthetic drug isolate remedies according to the group analysis method proposed by Rajan Sankaran (Sankaran, 2002). The synthetic recreational drug isolate remedies included Heroinum, 3, 4-Methylenedioxy-n-methylamphetamine (MDMA), Methylphenidatum hydrochloricum (MPH), Cocainum hydrochloricum and Lysergic acid diethylamide (LSD).

The objectives of this study were:

- 1. To ascertain if common characteristics belonging to the synthetic recreational drug isolate remedies can be extracted.
- 2. To identify the common characteristic sensations and reactions (active, passive or compensatory) of each remedy through an extraction process.
- 3. To classify each synthetic recreational drug isolate remedy according to Sankaran's extended miasmatic model (Sankaran, 1997).

1.2 <u>Rationale for the group analysis evaluation of remedies belonging to synthetic recreational drug isolates</u>

- Synthetic recreational drug isolate remedies are not well represented and are poorly documented in homoeopathic literature. This study will enhance our understanding of the homoeopathic materia medica of these remedies.
- 2. From searching the literature, it appears that Sankaran's method of group analysis has not previously been applied to the synthetic recreational drug isolate remedies.
- 3. Information from the group analysis can enhance our utilization of these drug remedies to ensure that they acquire a more significant role in homoeopathy and in clinical practice (Wulfsohn, 2005).

This study can form the basis for other studies extracting themes of the synthetic recreational drug isolate remedies, thereby contributing to the possibility of these remedies eventually being classified in their own class.

CHAPTER 2 LITERATURE REVIEW

2.1 <u>History of homoeopathy</u>

Homoeopathy is a system of medicine that was discovered and developed by a German physician, Christian Friederich Samuel Hahnemann (Vithoulkas, 1998:94). Having been commissioned to translate William Cullen's 'A Treatise on Materia Medica' from German into English, Hahnemann became skeptical of the author's assumption that the drug Quinine (Peruvian bark) was an effective anti-malarial agent due to its bitter taste (de Schepper, 2001:xv). Hahnemann decided to experiment with the author's theory and began ingesting crude doses of the bark over several days, following which he began to produce symptoms of malaria (de Schepper, 2001:27). Hahnemann had unofficially "proven" his very first remedy - China officinalis (Bradford, 2004:45). It was from this momentous experiment that Hahnemann realized that quinine can be used to treat malaria, not because it is bitter tasting, but because it is able to induce symptoms similar to that of malaria in a healthy person (de Schepper, 2001:27). It was also from this discovery, followed by a subsequent six years of provings, that Hahnemann proclaimed the first and fundamental law of homoeopathic medicine, the Law of Similars or "Like Cures Like" (Bradford, 2004:46). This principle states that if a substance produces symptoms in a healthy person, it can cure the same symptoms in an ill person (de Schepper, 2001:26).

However, the Law of Similars is an age old concept that predates even Hahnemann himself. Hippocrates mentions that one method of cure is by 'similarities', Boulduc states that the purgative quality of rhubarb can be used to treat diarrhea, while Detharding states that the herb senna cures colic because it produces a similar effect

on a healthy person. It was Hahnemann however, who was the first to truly systematize this law into the field of homoeopathy (O' Reilly, 1996:57). Scholten states that the Law of Similars is not limited to the system of homoeopathy and that there are a variety of modern medicines that are able to produce the symptoms that the same medicines are used to treat. These include anti-depressants which can lead to depression, and methylphenidate hydrochloride which is used to treat Attention Deficit and Hyperactivity Disorder (ADHD) and which can also lead to restlessness (Scholten, 2004:231-232).

2.2 Proving

Hahnemann proved nearly a hundred remedies upon their similar illnesses during his lifetime (Vithoulkas, 1998:95). A proving is a systematic process of administering substances to healthy individuals, in order to learn the alterations, signs and symptoms of the action of the substance upon an individual (O' Reilly, 1996:144).

Human beings are the preferred subjects for provings because symptoms in the mental and emotional planes are required, which cannot be obtained from animals or plants.

When a proving substance is administered, it stimulates the organism and its defence system to produce mental, physical, general and peculiar symptoms. These symptoms represent the specific manifestations of the defence system (Vithoulkas, 1998:97). Similarly, when the symptoms of a patient are recorded, the specific manifestations of the defence system are recorded (Vithoulkas, 1998:144). By matching the symptom of the remedy to the symptoms of the patient, a patient's symptoms can be alleviated or cured (Vithoulkas, 1998:96). Therefore, provings reveal invaluable, precise and accurate knowledge of a substance through the actual experience of a prover (Sherr, 1994:4).

2.2.1 Information on the provings of the drugs

Cocainum hydrochloricum

The original proving of cocainum hydrochloricum could not be located; therefore information was obtained from Synthesis: Repertorium Homeopathicum Syntheticum. Edition 9.1 and Radar 10 (Archibel, 2005).

Heroinum

Janet Snowdown conducted the proving in 1998/1999 with eighteen provers. Twelve were females while six were male. A 30CH potency was used and it was a Hahnemannian proving (Snowdown, 2002).

MDMA

The proving was done by Declan Hammond in 1997, with sixteen provers using 30CH potency. Information was obtained from ReferenceWorks Pro 5.6 (Kent Homeopathic Associates, 1998).

Methylphenidatum hydrochloricum

Michael Chein conducted the proving of *Methylphenidatum hydrochloricum*.

The proving of *Methylphenidatum hydrochloricum* consisted of two groups of provers and utilised two methods:

The first group took the remedy in 6CH, 12CH, or 30CH daily for up to 14 days or until there was a reaction. The second group received the crude substance in increasing quantities:

First day- 3 mg
Second day-4 mg
Third day 5 mg

And so on, up to 10 days or until there was a reaction.

Those who reacted optimally to the remedy received a second dose of 30CH after the symptoms from the crude dose subsided. The two groups had one placebo each. (Proving data was obtained from an email from Michael Chein on 4 October 2011)

Lysergic acid diethylamide

Misha Norland conducted the proving of LSD in 1999. There were sixteen provers with eleven female and five male. Ten of the provers administered one dose of the remedy in 30CH, while six provers did not administer the remedy (Norland, 1999).

2.3 <u>Dilution and potentization</u>

Hahnemann discovered that if substances which were toxic in their biological action were administered to an already existing disease state, it would stimulate an aggravation of the condition it was supposed to cure. This led Hahnemann to dilute the toxic substance in a manner which reduced its toxic effects, without diminishing the efficacy of the remedy. This was achieved by mechanically agitating the toxic substance between each dilution (Galego, 2008:62). This process of serial dilution and addition of kinetic energy to a substance is called *potentization* (Vithoulkas, 1998:102). Potentization only alters the qualitative state of a substance, as the more a substance is potentized, the greater the therapeutic effect of it (Vithoulkas, 1998:102). Through potentization, a substance still retains its healing properties as long as it is administered according to the Law of Similars. Therefore, potentization has allowed practitioners to safely prescribe otherwise toxic substances such as *Aurum metallicum* (metallic gold) (Galego, 2008:63).

2.4 Perfinity

Scholten introduced the principle of perfinity, which corresponds to affinity, meaning related. This principle states that similar substances will have similar qualities, and the resemblance in one field or dimension, indicates a resemblance in another field. In homoeopathy, this can be translated as "similar remedies will have similar pictures". An example includes the Solanaceae (Nightshade) family which includes members such as Atropa belladonna (Deadly nightshade), Hyoscymus niger (Henbane) and Datura stramonium (Thorn apple). The botanical study of the forms and structures such as the flowers are alike, and were therefore in the past categorized in one family. Later, it was discovered that the Solanaceae plants share chemical molecules which include characteristic alkaloids such as atropine, hyoscine, scopolamine and solanines. Research has shown that the DNA of plants from the same family also have DNA sequences that are typical of the family. For instance, intoxication with the plants from the Solanaceae (Nightshade) family produces characteristic symptoms such as paralysis of the parasympathetic system, raised heart rate, rapid respiration and dilated pupils. The symptoms of the individual provings of the remedies which are members of the Solanceae family have been shown to have similar symptoms in the materia medica. Therefore, members of the Solanaceae (Nightshade) family have similarity in form, chemicals, DNA, intoxication and materia medica picture (Scholten, 2005:41-43).

Perfinity is an extrapolation of group analysis as substances are grouped according to certain similarities amongst them.

2.5 Diadoxis

Diadoxis involves Hering's Law, which is one form of diadoxis (Scholten, 2004:231). Hering's Law states that when a remedy is acting curatively, the symptoms are relieved from within outwards (from a deeper level to superficial level), from above downwards (where the more vital organs e.g. brain that occupy a higher level are relieved first), and symptoms are relieved chronologically in the reverse order of their appearance (the

latest symptom is removed first, then the one which preceded it and so on) (Guavante, 2002:12).

While Hering's Law demonstrates only the direction of cure, diadoxis explains a disease or pattern that can be transferred or translated from one level to another (Scholten, 2004:231). For example, a problem on an emotional level can be transferred to the physical level, producing a physical ailment – grief from the loss of a spouse can lead to the development of cancer. This principle is also known in conventional medicine, through terms like "syndrome", "suppression", "conversion" and "metastasis" (Scholten, 2004:231). One such example is asthma alternating with atopic eczema (Scholten, 2004:231). De Schepper (1994:82) also describes this phenomenon giving examples such as the development of a tumour in the liver or other organs after a person has undergone a mastectomy with radiation and chemotherapy.

Homoeopathy, according to the principle of diadoxis, can be re-defined as "the science of the pattern behind the disease, and how patterns are translated into different forms" (Scholten, 2004:231).

2.6 <u>Miasm</u>

Miasm is derived from the Greek word meaning "pollution or taint" and was first explained by Hippocrates as a term to describe how infectious diseases can be transmitted by air, water and others sources. In the Middle Ages, it was described as an atmospheric influence which caused illnesses. Some practitioners suggested that a miasm is an unknown cause of disease that pollutes a person and produces a permanent disease state (de Schepper, 2001:355).

While treating his patients, Hahnemann began to question why seemingly well selected remedies failed to produce any true lasting recovery in chronic diseases, as his patients would relapse. To understand the true nature of chronic diseases, Hahnemann decided to study the patterns of disease of his patients and their families. He referred to these

patterns as *miasms*. Hahnemann considered a miasm as an obstacle to cure and it can lie in the background behind all pathologies and bring forth a disease (O' Reilly, 1991:25-30). If a miasm is not eradicated, it can persist throughout a person's life and can be transmitted from one generation to another (de Schepper, 2001:356).

At the time, syphilis was considered as the only miasm because the etiology was unknown and sycosis or 'figwart' disease was not considered a miasm because it was believed that a person can be cured by removing the condylomata. Despite this, Hahnemann delineated three miasms: the psoric, sycotic and syphilitic miasm (de Schepper, 2001:355). Later, homoeopaths like Compton Burnett added the tubercular miasm and the cancer miasm, while the AIDS miasm has been the latest miasm to be added to the existing theory of miasms (de Schepper, 2001: 413).

2.6.1 Psoric miasm

Psora is derived from the Hebrew word *tsorat*, meaning 'groove, defect, pollution or stigma.' According to Hahnemann, psora is the oldest and most universal miasm and the primary manifestation of psora is expressed through the skin. It can be expressed through eruptions of all kind such as erysipelas and scabies or itch. Hahnemann believed that everyone has the psoric miasm as it was easily transmitted through scratching of the eruption. If the eruption was suppressed through allopathic treatment, the psoric miasm would be considered to be a latent susceptibility remaining in the person (de Schepper, 2001:356-364).

2.6.2 Sycotic miasm

Hahnemann believed that if acute gonorrhea is suppressed with allopathic treatment, it imposes the sycotic miasm on a person (de Schepper, 2001:377). Sycosis is derived from the Greek word 'sykon', meaning fig, as a person with a sycotic miasm can produce condylomata that resemble the shape of a fig (Owen, 2007:224). If untreated, the sycotic figwart can produce secondary ailments, affecting the whole individual (O'

Reilly, 1991:150), unlike the psoric skin eruptions which can naturally disappear (de Schepper, 2001:378).

2.6.3 Syphilitic miasm

Hahnemann considered that the syphilitic miasm was created by suppressing syphilis and passing it onto resulting generations. The miasm can also occur through a primary infection suppressed with antibiotic treatment. The suppression can affect vital organs and the mind with an inclination to destruction, which is a predominant characteristic of syphilis (de Schepper, 2001:398-400).

2.6.4 Views on miasm

Many people have rejected and criticized Hahnemann's theory of miasm. However, homoeopaths such as Hering, Gross, Stapf and Kent found the miasmatic theory beneficial to their practice (de Schepper, 2001:357). Sankaran explains miasm as the way one perceives a situation or as a mode of reaction towards a certain situation (Sankaran, 2005b:263). If the reaction to a certain situation is an instinctive reflex or to escape, the miasm can be acute (Sankaran, 2005b:287). In the sycotic miasm, the reaction to a certain situation can be of acceptance or avoidance (Sankaran, 2005b:265). His view can also be related to the stages found in the periodic table as miasms are an expression of the stages. Mangialovori views miasm as stages of development of a disease. He believes that remedies are not psoric, but can be in a psoric state (Scholten, 2008). Clinically, a homoeopath can establish the fundamental disease (or miasm) in each case, and then select the appropriate anti-miasmatic remedy to restore the patient to health (Vogel, 2007:6).

2.7 The homoeopathic repertory

The first repertory, through Von Boenninghausen, was one of the earliest methods of categorization and selection of remedies (Somaru, 2008:14).

The usage of a repertory allows the user to list particular remedies that correspond to each symptom presented in a case. It creates a short list of differential remedies that can be used in the case. The user can compare between all the remedies with similar symptoms as well as to differentiate between them. This process is called repertorization. The aim of a repertorization is to limit the number of possible curative remedies through a process of generalization, comparison and differentiation (Vogel, 2007:7-9).

With modern information technology, repertories have been converted into computer software formats for analysis and extraction purposes. The development of software based homeopathic literature has aided the classification and differentiation of homeopathic remedies, as computer programmes can filter the vast amounts of literature (Wulfsohn, 2005:1).

Computer programs such as Radar 10 (from Archibel S.A. (2005) and ReferenceWorks Pro 5.6 (from Kent Homeopathic Associates, 1998) were utilized in this study. Radar Synthesis 10 is computer repertory analysis software which is used to search through a vast number of rubrics, and distinguish a desired group of remedies based on common rubrics. It is an important research tool as it allows one to search through large amounts of repertory data (Archibel S.A., 2005). ReferenceWorks Pro 5.6 is a homoeopathic software that contains over seventy thousand remedy descriptions, three thousand five hundred provings, extractions from ten repertories, as well as journal articles and cured cases (Kent Homeopathic Associates, 1998)

With the rapid pace at which homoeopathic knowledge is expanding, not all new materia medica and provings can be included in the current software, such as Encyclopaedia Homoeopathica (Harkhu, 2011:27). Encyclopaedia Homoeopathica contains various sources from classic authors such as Kent, Allen, and Herring to more recent provings, books and the modern works of George Vithoulkas and Jonathan Shore (Kratimenos, 2001). However, information from Encyclopaedia Homoeopathica could not be utilized as it did not have the relevant literature required.

The repertory is important in group analysis of remedies as it allows for in depth extraction of similar symptoms which allows the level of analysis to proceed to a complete group analysis.

2.8 Classification and group analysis

In the past, many practitioners used symptoms as the only (or almost only) guide to the remedy without really considering the source of the drug (Scholten, 1993:23). Due to the similarity between remedies and the rate at which new remedies are constantly being proven and added to the materia medica, it often made it difficult to distinguish the correct remedy. Therefore, there is a need to organize and categorize the information in the homoeopathic materia medica (Wulfsohn, 2005:5-6).

Scholten states that classification of remedies has always occurred according to their chemical and biological properties, miasmatic theory or through repertorization. Farrington studied remedies according to relationships to each other. He arranged remedies into three divisions according to the kingdom of nature from which they were derived: Animal, Vegetable and Mineral Kingdom. Farrington felt that remedies that belong to the same family must have a similar action (Farrington, 1992:23-24). Farrington also further analyzed the remedies in a manner which also served as a comparative materia medica (Farrington, 1992:14).

Candegabe developed a process to simplify and facilitate the selection of the correct remedy. Candegabe based his work on polychrests. He describes each polychrest and presents all the rubrics and characteristic symptoms that are inter-related and which define the remedy well. He then selects five to ten characteristic symptoms of the remedy called the Minimum Characteristic Syndrome (MCS). The polychrest remedy is then analyzed against other remedies whose themes closely overlap with the MCS of the relevant polychrest (Candegabe, 1997: xv-3). Therefore, this method can help differentiate between similar remedies and to prescribe more accurately.

Kent generated many remedy pictures by combining specific constituent components of certain polychrest mineral remedies. For instance, he was able to depict the themes of *Kalium silicatum* (Silicate of Potash) based on information from *Silicea terra* (Silica) and potassium salts like *Kalium bichromicum* (Potassium bichromate) (Watson, 2004:25).

Over the last two decades, new methods of classification have emerged. The modern way of working with classification is called Group Analysis.

Sankaran developed the classification of kingdoms, family themes and miasms, while Scholten classified remedies from the mineral kingdom and the theory of elements (Scholten, 2005:38-39).

Mangialavori explored the themes of the spider and snake groups (Wulfsohn, 2005:14).

Nancy Herrick has developed the themes of mammals through provings of their milk (lac). The remedies include *Lac Loxodonta Africana* (African Elephant), *Lac Leoninum* (Lion), *Lac Lupinum* (Wolf), *Lac Delphinium* (Dolphin) *and Lac Equinum* (Horse) (Herrick, 1998: xi). Farokh Master refined the work on milks by connecting common themes from all nine animal milk (lac) remedies: *Lac caninum* (Dog), *Lac caprinum* (goat), *Lac delphinium* (dolphin), *Lac equinum* (horse), *Lac felinum* (cat), *Lac humanum* (human), *Lac leoninum* (lion), *Lac lupinum* (wolf), and *Lac vaccinum defloratum* (skimmed milk). Farokh discusses six themes amongst the milks which are: relationship and separation, emotional turmoil (forsaken feelings), friends (desires to belong to a group), falling down (physically falling and falling down into an animal state),

impulsiveness under control (rage and sexuality, with a history of abuse), and antagonism (Yasgur, 2006:51).

In homoeopathy, groups of remedies are often referred to as a family of remedies. Grouping remedies has allowed family pictures to be developed as the family picture is a thematic expression, which all the members of the family have in common. The family picture will be more generalized, while the pictures of each member will be seen as specializations of the general family picture. For example, the family picture of the Gold series has the theme of responsibility and leadership. *Aurum metallicum* (metallic gold) shares the thematic expression of the Gold series, but with the specialization of maintaining and preserving their power and responsibility, which is not part of the general family picture. Therefore, the family picture is developed first, and then the differentiation between the family members is analyzed (Scholten, 2005:44).

Group analysis can enhance our insight and understanding of well known and relatively unknown remedies (Scholten, 1993:289). It enables the prediction of a remedy picture without actually conducting a proving. This can accelerate the pace at which remedies are added to the homoeopathic materia medica. Group analysis also expands the number of possible symptoms and expressions of a case, which will enable more cases to be understood and differential diagnoses can also become simpler and clearer (Scholten, 2005:40).

Sankaran states that group analysis should be used in conjunction with the traditional homoeopathic learning of homoeopathic materia medica and repertory as this method cannot replace the older methods of learning. It merely gives an opportunity to look at remedies and cases from several viewpoints, as compared to only one viewpoint. Group analysis seems to be a natural and inevitable progression of homoeopathy (Sankaran, 2005b:667-668).

2.9 Group analysis according to Jan Scholten

Scholten (1993) focused on the use of the periodic table in homoeopathy to classify and group mineral remedies. Scholten's method involves studying groups of chemically related elements where common symptoms are extracted (Scholten, 1993:11). For example, *Kalium muriaticum* (potassium chloride), *Kalium sulphuricum* (potassium sulphate) and *Kalium phosphoricum* (potassium phosphate) are minerals that contain the element Potassium. The themes and characteristics that are common to the whole group are distilled out of the overall picture, and subsequently applied to the unknown Kalium (potassium) salts (Scholten, 1993:68).

In his work *Homoeopathy and the elements* (Scholten, 1996), Scholten developed a theory regarding the use of the periodic table in homoeopathy. The periodic table consists of seven horizontal rows and eighteen vertical columns. Scholten refers to the horizontal rows as series, while he refers to the vertical columns as stages. Scholten proposes that each row (series) in the periodic table corresponds to a basic life theme or period of development, with a progressive line of development from one series to the next, from conception in row one to disintegration and destruction in row seven. Each series is named after the most prominent element found in the row: hydrogen series, carbon series, silicum series, ferrum series, silver series, gold series and uranium series (Scholten, 1996:18-28).

Each series represents a period of development, with each period having a rise or beginning, a summit, and a decline or fall. According to Scholten, this rise and fall can be divided into eighteen stages (columns). Each stage or column (from one to eighteen) corresponds to the individual phase of development of that row. All the elements prior to stage ten represent a gradual development of a particular quality; with the development reaching its peak or success at stage ten; and then the gradual decline and loss of that quality from there onwards through to the seventeenth stage (Welte, 2006:76).

With a greater understanding of the periodic table, one can see how minerals relate to each other laterally and vertically (Scholten, 1996:8). One can also begin to predict trends developing within each row and predict themes of relatively unknown mineral remedies (Weston, 2010:12). For example, he develops the theme of *Ferrum metallicum* (iron) by taking the themes of stage eight and combining them with the characteristics of the ferrum series. The themes of stage eight are of perseverance, maintaining, force, resistance, planning etc. The ferrum series has themes of task, duty, work, craft, rules etc. By combining the themes from stage eight and the ferrum series, the theme of *Ferrum metallicum* (iron) can be developed namely, persevering in ones job and being firm (Scholten, 1996:400).

Scholten also introduced new Lanthanide mineral remedies which are elements of the periodic table with atomic numbers from fifty seven to seventy three. Scholten correlates the ascent and descent of Lanthanides in their respective stages from stage four to fourteen. Louis Klein mentions that the discovery of the Lanthanides offers a broader therapeutic model for application as Scholten suggests that Lanthanides may be used to treat auto-immune diseases (Scholten, 2005:10-13).

Scholten's method of group analysis has allowed for the extrapolation of remedy pictures which have not been proven yet, even though Scholten still believes that these remedies should be proved (Scholten, 1993). However, as homoeopathy is science based, Scholten's method needs to be validated through proving's. This can provide an area for future research.

2.10 Group analysis according to Massimo Mangialavori

Contrary to many homoeopaths, Mangialavori believes that provings are not the ideal source to study homoeopathic materia medica, as they only yield long lists of detailed, subjective, symptoms (Moskowitz, 2012). Hence, he is of the view that information from traditional books like repertories; homoeopathic materia medica's and provings is not accurate (Hayes, 2000). Instead, a person should rather know the importance of each

symptom used for prescribing the remedy (Moskowitz, 2012). This requires a system for organizing and prioritizing the data. Mangialavori's system emphasized clinical, cured cases as a foundation for expanding our knowledge of homoeopathy (Ihrig, 2012).

According to Mangialavori, themes, rather than rubrics or provings, are a preferred method of organizing information and systemizing remedy states (Ihrig, 2010). One can also connect the themes that lead to the prescription of a remedy, as well as apply it to other patients needing the same remedy (Moskowitz, 2012). Mangialavori considers a theme or concept to be an aspect of the remedy if that remedy expresses the same concept throughout the entirety of its symptoms (mental, emotional, and physical). Recording themes also enables one to differentiate remedies into families which are similar to each other. These themes are defined by the general themes that characterize them homoeopathically, and not necessarily by a connection between their chemistry, botany, zoology, etc (Hayes, 2000). Mangialavori refers to themes as a 'checklist' which he can consider as a means of differential diagnosis in prescribing (Hayes, 2000).

Unlike Sankaran and Scholten who identify homoeopathic remedies according to their taxonomy (their place in nature), Mangialavori's concept of homoeopathic families intersects genus and even kingdoms. Mangialavori's "Praxis" Volume II consists of case studies of 'drug family' remedies (Anhalonium lewinii, Psilocybe caerulescens, Agaricus muscarius, Lycoperdon bovista, Convolvulus duartinus and Nabalus serpentaria) (Ihrig, 2012). The choice of these 'drug' remedies were intentional, as Mangialavori wanted to demonstrate that various remedies may be closely related despite not belonging to the same botanical group or kingdom. In the preface of Praxis, John Sobraske mentions that Mangialavori's method also demonstrates the need to create a classification based on pertinent themes derived from remedies and clinical case studies, rather than based on assumptions about similarities or differences based on taxonomy (Mangialavori, 2010:xix). Thus, Mangialavori believes in classification based solely on the homoeopathic characteristics of the remedies themselves (Moskowitz, 2012).

An advantage of Mangialavori's method is that his understanding of remedies is based on his clinical experience and is not just based on literature. However, Mangialavori's ongoing process of integrating data from various sources is a complex method of classification and may lead to confusion for the neophyte homoeopath.

Mangialavori describes explains his approach by referring to the "horizontal" and "vertical" axises of classification. Horizontal classification relates to taxonomy in the case of plants and animals and periodic table organization in the case of the mineral kingdom. This classification occurs if the substances are biologically related. Vertical classification depends on coherent symptom groups, themes (characteristic and fundamental keynotes) and structural symptoms of a patient (Ihrig, 2010). A coherent group of symptoms involves grouping logical symptoms together. For instance, in the *Arsenicum* group, there is a characteristic burning pain. If a patient has a symptom of burning pain in the elbow, and one cannot find it in the repertory or materia medica, Mangialavori believes that it will be more helpful to understand that the feeling of burning pain is found in the *Arsenicum* group. It is more helpful to understand the characteristic theme of burning pain than to remember the specific symptoms of a remedy (Mangialavori, 2002:7-9)

2.11 Group analysis according to Sankaran

Homoeopathic practice is generally based on identifying the symptoms of a remedy. Sankaran takes this further by stating that the symptomatology of any remedy is intimately related to the source it is drawn from, as each remedy has an essence and connection with its source (Sankaran, 1999:313). Bearing this in mind, Sankaran wanted to differentiate between a person requiring a plant remedy from one who needs an animal or mineral remedy. He decided to observe hundreds of patients in his practice to see if the "spirit" and character of a substance can be expressed in a human being. He found this to be the case, and went on to classify remedy states into different kingdoms: mineral, plant and animal (Sankaran, 2005b:46-48).

2.11.1 Kingdoms

2.11.1.1 Mineral kingdom

Sankaran believes that the mineral kingdom is characterized by structure and organization and that these themes can be seen in individuals' work, relationships, dressing, speech, handwriting etc. He suggests that they tend to wear clothes that have symmetrical patterns, stripes or are plain; their handwriting is very neat and structured; they present their complaints in a systematic manner and they speak in an organized manner in a monotonous tone. These characteristics are due to the structured thought process of the person's mind (2005b:293-295). Such individuals choose professions that require these qualities such as engineering, accountancy and management (1999:316).

These mineral themes can also be shown through the role that individuals from the mineral kingdom seek for themselves. Their role will also have the themes of structure and order. For example an *Aurum metallicum* individual will take responsibility for others, as they see their role as providing a supporting structure for others. Whatever the chosen role, the characteristics of order, organization and efficiency will be apparent (Sankaran, 2005b:295).

According to Sankaran, the periodic table contains elements that exist in an ordered, structured relationship to each other. He suggests that as the elements progress across the periodic table from Hydrogen to Radon, the elements become progressively heavier and more complex. Eventually, the complexity and heaviness of the structure results in its own destruction. The atoms becomes so heavy that their inner structure can no longer be held together resulting in physical disintegration, as seen in the radioactive gas, Radon. Therefore, the ordered structure of the whole periodic table represents a journey from a simple, light beginning (first few rows of the periodic table), through progressive development and possibilities (middle row), to increasing heaviness and

complexity, which ultimately results in disintegration and decay (sixth and seven rows) (Sankaran, 2011:87).

There is also a connection between the periodic table and human development as the development of each row corresponds to the stages in human development (Sankaran, 2005b:297). This occurs from conception or the beginning of existence to death (Sankaran, 2007a:35), with each row of the periodic table showing the rise and fall of their respective issues (Weston, 2010:23). A patient might require a mineral remedy if they feel 'stuck' in a particular stage of development (Sankaran, 2007:35).

Unlike the other kingdoms, a mineral person will see problems within themselves and not with the opposite person. Problems can arise when there is a lack or loss of structure or function. People requiring a mineral remedy are affected by breaks in relationships, financial losses or failure in their performance as such events affect the integrity of their structure. The reaction to the break in structure is to make up for the lack or loss by trying to complete, conserve or maintain the structure that they have. They may also become strong, systematic and calculating (Sankaran, 2005b:289-296).

Sankaran decided to further sub classify the mineral kingdom to be more specific. He classified the mineral kingdom into metals, cations, anions, salts and acids. The main theme in the metal group is related to performance and defence. For example, the remedies from the fourth row are more associated with defence than performance while the remedies in the fifth row are more associated with performance than defence. The theme in the cation group is a need for relationships, either forming relationships or needing support. The main theme in the anion group is to make an effort to maintain or keep a relationship. The features of salts are based on the two constituent elements that are interacting with each other. From the two constituents, the cation needs to form a relationship, while the anion is concerned with maintaining a relationship. The acid group is associated with a period of struggle, followed by collapse and exhaustion. The acid of an element represents a constant struggle in the situation of that element (Sankaran, 2005b:49-50).

2.11.1.2 Animal kingdom

Competition and survival are the basic themes of the animal kingdom (Sankaran, 2005b:307). All animals depend on plants or other animals for their existence as they cannot make their own food. Animals have to compete in order to survive and compete in terms of territory, food source, sexuality and habitat (Owen, 2007:295).

Sankaran suggests that an individual requiring an animal remedy needs to draw attention to themselves as being attractive, which is another aspect of their competitiveness. They can express their attractiveness through their style, colour and design of their clothes. They can even wear dull clothes to a party as the aim is to be different and noticeable. The need to be attractive is also related to sexuality. The fundamental issue in the animal kingdom is survival, not just of self, but of the group. This is important to the entire animal kingdom, therefore sexual attraction is a strong theme (Sankaran, 2011:87).

A person requiring an animal remedy will also seek attention through their behaviour by being loquacious, lively, animated, and expressive, constantly making eye contact and being communicative. They choose professions that are competitive and require attractive behaviour such as marketing and advertising. They can be jealous and malicious and can do anything to achieve their goal, as they have to survive (Sankaran, 2005b:308).

There is also a theme of one versus the other just like some animals are predators while others are prey. They focus on other people as they view them as aggressors or victims. For example, when they feel victimized, they will express themselves as if they are being "tormented" and "persecuted." There can be competition between the victim and aggressor, or a fight between the stronger and weaker one where the stronger one survives, while the weaker one is defeated (Sankaran, 2005b:307-308).

Besides having conflict with other people, Sankaran states that individuals can feel a conflict or split within themselves. This conflict may result in a person having two sides – an animal side which is concerned with competition and survival, and a human side which has contempt for the animal within (Sankaran, 2005b:51).

Problems occur in a person requiring an animal kingdom if they are neglected, less capable of competing or they lose their attractiveness (Sankaran, 1999:314). Their dreams can also reflect these problems and fears (Sankaran, 2005b:308).

2.11.1.3 Plant kingdom

According to Sankaran (2005b:305), the basic theme in the plant kingdom is sensitivity and reactivity. Plants are able to make their own food (chlorophyll) by reacting to sunlight and drawing water and minerals from the ground. As a plant is unable to physically move, it needs to adjust to the external and internal environment to survive. A plant's survival depends on a great sensitivity and reaction to the outside world (Owen, 2007:297). Therefore, a person requiring a plant remedy is generally sensitive, reacting to weather, temperature, criticism, grief and disappointment. As they are easily affected by many factors, they use common expressions such as "I am affected by," and "I am sensitive to." Problems can occur if they are emotionally or physically hurt as they are soft, emotional, and fear being hurt (Sankaran, 2005b:305).

Sankaran suggests that an individual requiring a plant remedy can express their sensitivity through their talk, dressing, speech etc. They prefer to wear clothes that have pictures of flowers or that have irregular patterns and their writing can be disorganized and irregular. The nature of their complaints can be inconsistent in nature with many modalities, have a rapid onset and they emphasize and describe their sensations distinctively (Sankaran, 2005b:306). Individuals requiring a plant remedy tend to select professions such as art or nursing etc. (Sankaran, 2005b:5).

2.11.2 Sankaran's concept of Vital Sensation

Sankaran noticed that all remedies of a given botanical family shared a common general sensation. However, it was not confined to the plant kingdom only, but could also be applied to the other kingdoms as well (Sankaran, 2005b:213). Each kingdom has its own unique basic sensation (Sankaran, 2005b:292) and identifying the common sensation helps recognize the central issue or core symptoms of the remedies (Sankaran, 2005b:126). The common sensation connects the mind and body. Sankaran called the common point between the body and mind the Vital Sensation. At this point, the mind and body 'speak' the same language and the vital sensation can be identified from the chief complaint of a patient, as it is an expression of the vital sensation (Sankaran, 2005b:140). Therefore, the concept of vital sensation can be a reflection of diadoxis. According to Sankaran (2005b:293), there are three basic vital sensations; viz. structure, survival and sensitivity which correspond respectively to the three kingdoms: Mineral, Animal and Plant kingdoms.

2.11.2.1 Extraction of sensations and reactions

Sankaran wanted to further sub divide the plant kingdom, as he did with the mineral and animal kingdom. As the main theme in the plant kingdom is sensitivity, Sankaran thought that each family within the plant kingdom would experience their own sensitivity, and that the sensation can reveal the type of sensitivity of each family (Sankaran, 2002:21). To confirm this, Sankaran conducted a repertorial search through software programmes such as MacRepertory. He extracted rubrics that were common to at least two remedies of a family. For example, Sankaran searched the MacRepertory for rubrics common to the remedies of the *Euphorbiaceae* family. He selected rubrics which had at least two remedies in the family. In the rubric "Skin; hidebound, sensation as if" he found that *Hura brasiliensis* and *Croton tiglium* shared this symptom, and they both belong to the *Euphorbiaceae* family (Sankaran, 2002:4). Sankaran also selected rubrics only if the sensation was indicated at the mental or physical level (Sankaran, 2002:4).

The results from his searching revealed that each family shared at least one common sensation which can be expressed in all the remedies of the family, in various ways (Sankaran, 2005b:22). The sensations can also be expressed or perceived in four different ways (Sankaran, 2005b:141):

- 1) As the sensation directly (Sankaran, 2005b:141);
- 2) As a reaction that is equal and opposite to the sensation. There are two types of reactions: active and passive (Sankaran, 2005b:141); or
- 3) As a compensation, where compensation involves covering up some aspects of our nature (Sankaran, 2005b:34).

For example, a person requiring a remedy from the *Euphorbiaceae* plant family shares a common sensation of "tied and untied, bound and unbound". The active reaction is "a desire to break free", the passive reaction is to be "tied and cannot do anything about it" and the compensatory reaction is to "feel free, unbound and not tied up" (Sankaran, 2005a:16).

Thus, through this process, Sankaran managed to subdivide the plant kingdom into various botanical families, with each family having their own individual sensations, expressions and characteristics such as the Loganiacea, Conifers, Papaveraceae and Rubiaceae families to name but a few (Sankaran, 2005a).

The next question was to be able to differentiate between remedies within the same botanical family that had the same expression. To solve this last obstacle, he classified the same members of the botanical family into different miasms. Though the sensation is common, each remedy perceives it in a different depth. The difference in the various remedies of the same botanical family is because they belong to different miasms (Sankaran, 2005b:126). *Croton tiglium* belongs to the *Euphorbiacea* family and shares the common sensation of the family, but is categorized into the acute miasm. Hence, the main feeling of *Croton tiglium* is "Acute threat from being suddenly bound" (Sankaran, 2002:248). *Hura brasiliensis*, which also belongs to the *Euphorbiacea* family, shares the sensation of the *Euphorbiaceae* family, but has themes of the leprosy

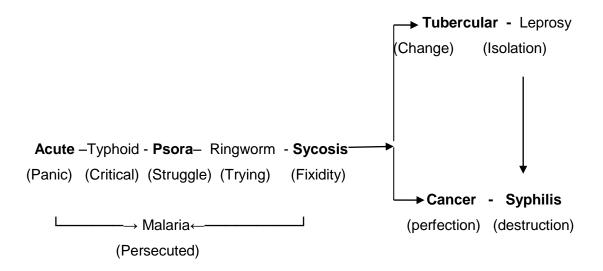
miasm. Hence, the feeling of *Hura brasiliensis* can be: "Condemned by being bound" (Sankaran, 2002:262). Thus, each remedy from a family has the combination of the family sensation and its individual miasmatic features (Sankaran, 2002:27).

2.11.3 Miasm

Through his experience, Sankaran realized that a disease is an attitude or a posture acquired by an organism to survive in a particular situation. This posture can remain even after the situation no longer exists. Thus, the person continues to perceive and react according to the original situation. Therefore, the mental state of a person can be recognized as a posture acquired by the person in response to a situation, even if the situation does not exist. The person falsely perceives the situation in a way which is inappropriate or unsuitable. According to Sankaran, disease is a basic delusion of the patient and by removing the delusion, the disease can be removed (Sankaran, 2005b:32-33).

Sankaran decided to study miasms in terms of his concept of 'disease as a delusion'. Miasms are a classification of diseases, therefore it is also a classification of delusions (falsely perceived situations) (Sankaran, 2005b:38). It is also a way a person perceives a type of situation which can be reflected through the depth and degree of desperation a person feels. Therefore miasms can be a measure of how desperate a situation is perceived to be (Sankaran, 2005b:263). The Psoric miasm is considered to be the least desperate while the Syphilitic miasm is considered to be the most desperate (Sankaran, 2005b:123).

There are many ways to perceive a situation and therefore, in addition to the three classic miasms, Sankaran identified seven more in-between miasms to the existing model. The new miasms were named after the diseases they most closely resemble and include: Acute, Typhoid, Ringworm, Malarial, Cancer, Tubercular and Leprosy (Sankaran, 2005b:228) (See Figure 1).



<u>Figure 1</u>: A map of Sankaran's extended miasmatic model with the main action of each miasm shown in brackets (Sankaran, 1997:228).

Sankaran (2005b:268-280) expressed his ideas on the general themes of each miasm.

Acute Miasm: The sensation is experienced as temporary, sudden, dangerous and life-threatening. Even though there is a threat to one's life, there is hope of recovery. The person generally reacts instinctively, and can panic or feel helpless (Sankaran, 2005b:268).

Psoric Miasm: A person can perceive a situation as a permanent stress, which often results in an instinctive and automatic response .There is a feeling of struggle and effort with some hope of recovery. Therefore, it is a mixture of self doubt and hope (Sankaran, 2005b:270).

Sycotic Miasm: The sensation is perceived as permanent but is not destructive. The reaction is one of acceptance, avoiding and hiding or covering up. The person cannot do anything about the situation and tries to hide their incapacity from others (Sankaran, 2005b:272).

Syphilitic Miasm: In the syphilitic miasm, the sensation is deep, permanent and destructive. The situation is perceived as hopeless and destructive. The reaction is usually desperate and extreme, often violent or drastic like suicidal or homicidal impulses. There is a feeling of complete isolation and hopelessness (Sankaran, 2005b:273).

Typhoid Miasm: This miasm is placed between the Acute and Psoric miasms. There is an experience of a sudden and temporary situation (as in the Acute miasm) but it requires a concentrated effort for a short period of time (as in Psora). The situation is like an intense, short crisis which requires a period of sustained effort (Sankaran, 2005b:274).

Malarial Miasm: This miasm is described as being between the Acute and Sycotic miasms. The sensation is felt as fixed and permanent (as in Sycosis) but there is also an experience of sudden, intermittent attacks (Acute miasm). This gives rise to feelings of being persecuted or hindered (Sankaran, 2005b:275).

Cancer Miasm: This miasm is situated between the Sycotic and Syphilitic miasm. There is the fixed nature of Sycosis together with the destructive nature of the Syphilitic. There is chaos which has to be controlled by a superhuman effort as there are limited resources (Sankaran, 2005b:278).

Leprosy Miasm: There is a sense of destruction, desperation and hopelessness as seen in the Syphilitic miasm, combined with the desperation and intensity found in the Tubercular miasm. A person can react by being desperate, destructive, isolated and in despair (Sankaran, 2005b:280).

Tubercular Miasm: This miasm lies between the Sycotic and Syphilitic miasms. The characteristics of this miasm are more desperate and oppressive than in the Cancer miasm. There is a sensation of being suffocated or trapped resulting in hectic activity to

escape the oppression and break free, but with little hope as destruction is imminent (Sankaran, 2005b:279).

Ringworm Miasm: This miasm is placed being between the Psoric and Sycotic miasms. The sensation is fixed and permanent (as in Sycosis) but is not irreversible. There is hope of recovery and struggle (as in Psora) with a reaction of intermittent acceptance creating a constant sequence (Sankaran, 2005b:277).

Generally, one always considers each miasm separately. However, a disease state is usually a combination of miasms, with its main focus on one miasm (Sankaran, 1999:45). Therefore, a remedy can belong to one dominant miasm, but have extensions or glimpses of symptoms showing the other miasms (Sankaran, 1999:45). An example is the remedy *Calcarea carbonica*. *Calcarea carbonica* is a psoric remedy, but has abscesses and polyps (sycotic); swollen cervical glands, nosebleeds and a susceptibility to chest colds (tubercular miasm); as well as syphilitic depression, melancholy and violence with a "Desire to kill" (de Schepper, 2001:367).

Sankaran mentions that miasm and sensation are also inseparable. Where there is a miasm, there has to be a sensation (Sankaran, 2005b:266). For example, if a person feels caught oppressively, 'caught' is the sensation and 'oppressively' represents the depth of the miasm (Sankaran, 2005b:283). The sensation and miasm together constitute the disease state as the disease state is the crossing point of the sensation and miasm (Sankaran, 2005b:266).

Sankaran's method of classifying remedies into miasms, kingdoms and families has revolutionized homoeopathjic practice and understanding of poorly represented remedies. In order to apply Sankaran's method, he does mention that once needs to have a deep, detailed understanding of his methods of classification, ideas and case taking skills etc (Sankaran, 1997: iii). Therefore, applying Sankaran's method may challenge new homoeopaths who lack the knowledge and in-depth understanding of his work.

2.12 A picture of the AIDS miasm

Syphilis was a pandemic at Hahnemann's time, and therefore he developed the syphilitic miasm. Similarly, it is necessary to understand the predominant pandemic of this time. Since AIDS is the current pandemic, it is very important to understand the AIDS miasm homoeopathically, and not only how the disease presents itself. The AIDS miasm is the latest miasm to be added to the miasmatic model, with the AIDS miasmatic picture being new and contemporary. It is also important to discuss the AIDS miasm as the themes from the AIDS miasm seem to overlap with the drug themes as well as include many drug remedies (Fraser, 2002:53-56).

According to Peter Fraser (2002:72), the themes of the AIDS miasm include:

- 1) Connection;
- 2) Disconnection;
- 3) Indifference:
- 4) Dispersion;
- 5) Instability;
- 6) Travel;
- 7) Extremes:
- 8) Confusion;
- 9) Feminization;
- 10) Portals; and
- 11) Vulnerability.

However, the main theme of the AIDS miasm is the dissolution of boundaries and the stresses that are caused by the dissolution. There is a need to connect and communicate, but the dissolution of boundaries results in disconnection and isolation, creating a conflict in the miasm (Fraser, 2002:68-69). The feelings of disconnection and isolation can lead to feelings of detachment, making them unable to distinguish between the real world and dream world (Fraser, 2002:115). Without connection there is no need to worry about what is happening, leading to feelings of indifference and apathy (Fraser,

2002:72). The indifference can become a lack or inability to feel, manifesting as numbness or anaesthesia (Fraser, 2002:137).

Boundaries are important as they give stability and losing these boundaries can create chaos, instability, a lack of order and eventually a confusion of senses, position, words, gender, identity and time (Fraser, 2002:208). A boundary also functions as a protective shell. The result of the loss of the protective shell is that a person is exposed, open and vulnerable. HIV is an infectious disease, and it makes a person open to infection and there is a sense of losing a protective shell (Fraser, 2002:255). With the feelings of vulnerability, it leads to feelings of anxiety, fear, paranoia and a lack of confidence which can also develop. This issue can also be seen in the Sycotic miasm as the person often has to be strong to reach their goal. In the Syphilitic miasm, the person feels small and vulnerable in a vast unbounded and dangerous world (Fraser, 2002:298).

Without definite boundaries between individuals and others there is no way for an individual to monitor their interactions, which leaves them open to external influences (Fraser, 2002:72). This results in an increase sensitivity to external influences and feelings of others, with improved perception or clarity of their surroundings (Fraser, 2002:89).

Without boundaries, there are no restrictions and a tendency to go to extremes which can lead to an excess of symptoms. This excess found in the AIDS miasm is similar to the ones seen in other miasms especially in the Sycotic miasm. However, the Sycotic miasm has a feeling of inadequacy, making one feel that they will never have enough and will always try to get a little bit more. In the Syphilitic miasm, the aim is to have more than the enemies that surround you. In the AIDS miasm, the boundary between having enough and having too much is not present as one keeps accumulating more and never realizes when to stop (Fraser, 2002:199-200).

Another theme found in the AIDS miasm is the involvement of skin as skin is often the first level of miasmatic expression. In Psora, there are eruptions that are chronic, last long, but are generally stable. In Sycosis, the theme of growth is noticeable as growths, warts and excrescences. In Syphilis, the skin symptoms are destructive and necrotic. In AIDS, the skin symptoms are non-specific, are likely to change and make the person conscious of their skin (Fraser, 2002:315).

The AIDS miasm also follows the pattern of the other three major miasmatic diseases, but to a deeper level. Psora is parasite, whose primary action is confined to the skin. Sycosis is a bacterium, whose primary action moves from the skin through the blood, and destroys soft tissue. Syphilis is also a bacterium, and moves through the skin and blood, but eventually affects the nervous system. It also destroys bones and hard tissue. HIV is a retrovirus which is transported from the skin to the blood and destroys soft and hard tissues and nerves (Fraser, 2002:7).

Finally, the theme of "portals" is important. The opening through a wall or boundary not only breaches it and opens it up to the other side, but it also outlines it as a boundary. Physical portals such as the mouth, anus and vagina are important sites of pathology in the AIDS miasm. The final boundary or portal is that which lies between the world of the living and the world of the dead (Fraser, 2002:322-326).

There are also some similarities between AIDS and tuberculosis as AIDS patients often succumb to tuberculosis. Scholten is of the view that the AIDS miasm and Tubercular miasm are both connected to stage 15 of Thulium (a Lanthanide) which has the theme of wasting away of flesh (Scholten, 2005:80).

The development of new diseases has required changes in the way we look at illnesses and the remedies we use. Just as Hahnemann used the theory of miasms to understand chronic diseases, the concept of the AIDS miasm can be used to understand new diseases (Fraser, 2002:8). Understanding the AIDS miasm will allow the homoeopath to identify the symptoms that are of it, and then choose an appropriate

remedy. A patient may talk about issues of the AIDS miasm like isolation, disconnection etc. If the response to these issues is characteristic of the AIDS miasm, a remedy belonging to the AIDS miasm will be needed (Fraser, 2002:43).

2.13 Drug remedies in homoeopathy

Drug remedies are an ill defined group in homoeopathy. Synthetic drug remedies are relatively new and include remedies derived from synthetic pharmaceutical drugs such as *Penicillinum* (Penicillin), *Amitriptylinum* (Amitriptyline), *Diazepam*, *Haloperidolum* (Haloperidol), to name but a few (Provings.info, n.d.). Some of the most well known 'drug' remedies are *Anhalonium lewinii*, *Cannabis Indica*, *Coffea cruda*, *Coca*, *Nux moschata*, *Agaricus muscarius and Opium*. However, they are not synthetic recreational drug isolate remedies.

Remedies from the synthetic recreational drug isolate group can be prescribed as a homoeopathic remedy in various forms. Synthetic recreational drug isolate remedies can be prescribed in two forms:

- 1) Tautopathic prescription or
- 2) Homoeopathic simillimum

Tautopathy means the prescribing of a potentised drug or toxin. One prescribes a tautopathic remedy if a patient has the aetiology of 'never been well since' taking a drug, poisonous chemical, toxin etc (Watson, 2004:108).

Another indication is if a patient presents with the ill-effects of a drug substance. A tautopathic remedy can be prescribed on the symptom picture to alleviate the ill effects of the drug, as long as it is clearly indicated (Watson, 2004:108). For example, if a person displays symptoms due to the effects caused by cocaine abuse, the tautopathic remedy of cocaine will alleviate the symptoms.

Homoeopathic remedies are prescribed based on the Law of Similars. If a person's symptoms from a case correlate to the proving symptomd of a certain drug remedy e.g *Cocainum hydrochloricum*, one will have prescribe this remedy as the simillimum.

Mangialavori notes that certain substances were traditionally used as drugs in different cultures, as each culture has its own unique drugs: *Coca* in South America, *Anhalonium lewenii* in mid-America, *Cannabis indica* in North Africa, *Opium* in the Middle East, *Agaricus muscarius* in Siberia, *Kava-Kava* in Polynesia. He considers drugs to be interesting as they were originally used to alter consciousness and to discover one's connection with God. Even though the thought of God is different in different parts of the world, and each culture uses a different substance, the drug substances do have many important features in common (Mangialavori, 1999).

Some general homoeopathic drug characteristics have previously been identified, including:

- Feelings of isolation and being forsaken with desires of escaping;
- Impressions and perceptions are increased (Hypersensitive);
- Pleasant feelings (euphoria, elation) and fantasies (can create their own world);
- Dreamy/Spaced out, carefree;
- Delusions/Hallucinations (includes visual, auditory, tactile etc);
- Numbing of pain/ avoidance;
- Addiction/Dependence;
- Disorientated/Confusion;
- Beautiful visions;
- Distorted perception of space and time; and
- Self destructive (Traub, in Lewis, 2007).

Through research in the plant kingdom, Sankaran proposed certain homoeopathic plant 'drug' themes:

 A feeling of alienation isolated and removed from the rest of the world – as if living in their own world;

- 2) A sense of upliftment and feeling that the world is beautiful;
- 3) Benevolence with the need to do something in order to feel a sense of belonging. Lack of sensitivity/Hypersensitivity; and
- 4) Activity of the mind with too many thoughts (Sankaran, 2002:516).

2.13.1 Other 'drug' related information

In the preface of Mangialavori's "Praxis" Volume II (2010), consisting of case studies of the "Drug family," Giovanni Marotta states his opinion on the work of the Drug family. He believes that a human being is born, progresses, dies, and then goes on to another state. There is a continuous process of integration and disintegration, construction and destruction in one's life. According to Marotta, drugs are well known for their characteristics of breaking down the psychosomatic integrity of a person. He compares this to an anatomical dissection, where the destruction allows one to glance into the underlying structure and function. Therefore, Marotta believes that drug substances help to reveal how an individual is put together.

In 2010, a book called "Power Drugs" was published and included articles on Cacao, Coffea tosta, Coffea cruda, Camphora, Guarana, Thea, Chocolate, Ephedra, Kola, Damiana, Kava Kava, Mate and Tabacum. Even these drugs have been used by different cultures for thousands of years, and are being consumed now on a daily basis as stimulants in the modern day competitive world. These drugs help to increase performance as they make one work faster, better and more effectively (Narayan Publishers, 2010).

No official group analysis has been conducted on synthetic recreational drug isolate remedies, and therefore the results from the current study is a valuable contribution and may lead to remedies from the synthetic recreational drug isolate group being utilized more often in homoeopathic practice.

2.14 Synthetic recreational drug isolates

Before progressing further, the following words need to be defined and understood (as per Collins Paperback Dictionary and Thesaurus, 2006):

- 1) Synthetic: a substance or material made artificially by chemical reaction; not genuine.
- 2) Recreational (in terms of a drug): taken for pleasure rather than for medical reasons or because of an addiction.
- 3) Drug: any synthetic, semi-synthetic or natural chemical substance used in the treatment, prevention, or diagnosis of disease, or for other medical reasons or taken for the pleasant effects it produces.

The classification of recreational drugs is illustrated in Table 1.

<u>Table 1</u>: The classification of recreational drugs (Goldstein, 2001).

	<u>Definitions</u>	<u>Examples</u>
CANNABINOIDS	Drugs that are a derivative of the plant <i>Cannabis indica and</i> can produce both hallucinogenic and depressant results.	• Marijuana.
<u>DEPRESSANTS</u>	Drugs that slow down the normal body function and the central nervous system (CNS).	Alcohol;Barbiturates;Methaqualone.
HALLUCINOGENS	Drugs that induce or produce hallucinations and disrupt the normal functioning of the CNS	 LSD; Methamphetamine; Amphetamines; PCP (Phencyclidene); Psilocybin (Magic Mushrooms).
<u>STIMULANTS</u>	Drugs that increase activity in the CNS	 Cocaine/Crack; Amphetamines; Methamphetamine; MDMA (Ecstasy); Nicotine, Ephedrine; Methylphenidate Hydrochloride.

NARCOTICS (Opiates)	Drugs that have a relaxing and pain relieving effect.	Opium;Heroin;
	, and the second	Morphine;Codeine.

2.14.1 Stimulants

Stimulants include substances like cocaine, caffeine, MDMA, amphetamines and methylphenidate hydrochloride. They excite the central nervous system and stimulate behaviour or arousal, increase alertness, suppress appetite and remove fatigue. Ironically, some stimulants like methylphenidate hydrochloride can also calm some forms of hyperactivity (Palfai and Jankiewicz, 1997:289).

2.14.1.1 Cocaine

Cocaine is derived from the leaves of the coca plant (*Erythroxylon coca*) which grows along the high altitude areas of South America in Bolivia, Columbia and Peru. Cocaine is also found in parts of South East Asia, India and Africa, but are not considered a major source of cocaine (Emmett and Nice, 1996:72).

The molecular formula of Cocaine is $C_{17}H_{21}NO_4$ and the molecular structure is illustrated in Figure 2.

<u>Figure 2</u>: Molecular structure of Cocaine and Crack (European Monitoring Centre for Drugs and Drug Addiction, 2011a).

The current street names of cocaine include: "coke", "snow", "flake", "white lady", "blow" and "C" (Hanson, Venturelli and Fleckenstein, 2012:305).

History

The Andean Indians, natives of South America, chewed coca leaves for thousands of years with statues and carvings illustrating this from as far back as 3000 BCE. The leaves were chewed for its stimulating effect as it eliminated the effects of cold and hunger experienced living at a high altitude (Emmett and Nice, 1996:72).

Each leaf contains about two percent of cocaine. Through mastication (chewing) with saliva, small amounts of the cocaine are released, which can then be absorbed once swallowed (Emmett and Nice, 1996:72). However, chewing the leaf decreases the amount of cocaine that reaches the bloodstream, therefore cocaine toxicity is rare amongst the Andean Indians (White and Lambe, 2003:27).

In1859, Albert Niemann isolated the alkaloid of the coca leaf and called it cocaine. He noted its bitter taste and numbing effect on the tongue. Its stimulating properties however were used to treat depression, as well as alcohol and morphine addiction. Due to its analgesic properties, it was used medicinally for dental and eye surgeries as early as 1884 (Palfai and Jankiewicz, 1997:303).

In Europe, heroin and opium addicts were given cocaine to ease their withdrawal symptoms. This was unsuccessful as the heroin and opium addicts turned into cocaine addicts (Emmett and Nice, 1996:72). Despite this, in 1885, John Styth Pemberton of Georgia produced a French Wine Cola which was a nerve and tonic stimulant containing products of the African kola nut and coca leaf (Palfai and Jankiewicz, 1997:304). In 1888, this drink was marketed as 'Coca-Cola' and it was used to treat headaches and act as a tonic for the elderly. Due to the dependence produced by cocaine-containing products, in 1906, the Pure Food and Drug Law 'decocainized' the coca leaves used in Coca Cola, and eliminated cocaine containing medications. Instead, caffeine was added to Coca Cola. However, cocaine was still used in the 1970s by Hollywood actors, artists, jazz musicians and models. From 1989 onwards, cocaine

has become a global business and is still a serious drug and social problem (Palfai and Jankiewicz, 1997:304-305).

Processing of Cocaine

The usual processing of cocaine involves extracting the alkaloid from the coca leaf in order to produce a coca paste. From the paste, the cocaine is stabilized as a salt using hydrochloric acid with the end process producing cocaine hydrochloride, which is a white crystalline powder. Once cocaine is distributed in the streets or dealers, it is 'cut' or diluted with substances like glucose, lactose, or other local anaesthetics like lignocaine. Therefore, the purity of a sample can vary, with some samples being only thirty percent pure. However, such a sample will still give the same numbing effect (like cocaine) to the tongue if tested on the street (Emmett and Nice, 1996:72-73).

Route of administration

The common method of administering cocaine is through intranasal insufflations or sniffing the powder into the nasal cavity. On average, a line of cocaine that is sniffed contains 30mg-50mg of cocaine. It is then absorbed into the blood stream through the membranes lining the nose. With long term usage, there can be ischaemic necrosis of the nasal cartilage, persistent rhinitis, rhinorrhea, anosmia and perforation of the nasal septum (White and Lambe, 2003:27-28).

Intravenous use of cocaine is less common although it can be injected into a vein (Emmett and Nice, 1996:79). Injecting into a vein provides the most rapid 'hit,' as the high concentration drug reaches the brain in a few seconds (Emmett and Nice, 1996:79). However, intravenous drug use is also associated with vasculitis, infections (hepatitis B and C, HIV etc), infective endocarditis (White and Lambe, 2003:28) and can cause the vein to collapse, leading to gangrene (Emmett and Nice, 1996:79).

Due to the dangers associated with intravenous usage, some prefer to inject subcutaneously through a method called 'skin popping.' Small amounts of liquid are injected into a fat layer such as those found in the thigh or upper side of the arm. Skin popping is slower as the drug substance has to be conveyed from the fatty layer to the main blood stream (Emmett and Nice, 1996:77-79).

Users may also rub cocaine into their gums, where it can be rapidly absorbed into the bloodstream. This method allows more of the drug to reach the brain than sniffing it; however it is not popular because of its bitter taste (Emmett and Nice, 1996:77).

Cocaine is rarely taken alone, with polydrug abuse being more common. Marijuana is often used to ameliorate the psychophysiological effects of the 'coming down' period. Alcohol use is also widespread because it prolongs the euphoria of cocaine. Cocaine and heroin mixtures are also injected for their combined effects. This is known as 'speedballs' (White and Lambe, 2003:28).

Metabolism

After using cocaine, it is rapidly redistributed from the blood to other blood rich areas like the brain. Five percent (5%) of cocaine is excreted unchanged in the urine and is still detectable in the urine three to six hours after use. Eight five percent (85%) of the drug is metabolized in the liver by liver enzymes. The remaining amount is metabolized by enzymes in the blood. The lethal and toxic dose of cocaine is unknown with most deaths occurring only in chronic abusers. An isolated blood measurement is not sufficient to determine toxicity (White and Lambe, 2003:30).

Mechanism of action

Conduction of a nerve impulse

The building block of the nervous system is a neuron or nerve cell. Each neuron can be divided into three parts: cell body, dendrite and axon. The axon is a single long process

that extends from the cell body and ends in branches called pre-synaptic terminals. The function of the axon is to transmit nerve impulses to the next neuron (Palfai and Jankiewicz, 1997:97).

When a neuron is stimulated, a nerve impulse or action potential travels along the axon until it reaches the synapse. A synapse is a junction of an axon with any other part of another neuron. The space between each pre-synaptic terminal and the next neuron is called the synaptic gap. Across the gap, on an adjacent neuron, is a membrane called the post-synaptic membrane. Therefore, when a neuron is stimulated, the action potential travels along the axon until it reaches the pre-synaptic terminals. It stimulates the release of neurotransmitters across the synaptic gap and attaches to receptor sites on the post-synaptic membrane where it stimulates the next neuron (Palfai and Jankiewicz, 1997:104-105).

Action on the central nervous system

Cocaine inhibits the reuptake of presynaptic norepinephrine and dopamine as well as the action of monoamine oxidase, which catabolizes epinephrine, norepinephrine and dopamine at the synapse. This results in the intrasynaptic concentration of norepinephrine remaining high. It allows prolonged activation of the sympathetic nervous system producing hypertension, hyperglycaemia, hyperthermia and mydriasis. Cocaine also increases the levels of epinephrine released from the adrenal medulla. The excitatory neurotransmitters are also increased, contributing to the euphoric feeling in the short term, and addiction in the long term (White and Lambe, 2003:30).

Cocaine use leads to the pleasurable high but also eventually depletes the stores of the neurotransmitters it affects. Cocaine users eventually lose the ability to feel this pleasurable sensation as the neurotransmitter stores are depleted further and further, and the brain becomes tolerant to the drug's effects. The drug also leads to severe cravings and depression when the drug is not present in the system. It can take many

months for the brain to re-build the stores of the various neurotransmitters (Henderson, 2001:57).

Local mechanism of action

When applied locally, cocaine produces anaesthesia by blocking the initiation and conduction of the action potential in all nerve fibers. It prevents the sensation of pain leaving an area and constricts the blood vessels, slowing its own absorption and also localizing itself at the desired site of anaesthesia (Palfai and Jankiewicz, 1997:309-311).

Clinical applications

The main use of cocaine is as a local anaesthetic. Local anaesthesia results in a loss of sensation, without the loss of consciousness or impairment of central functions like circulation and respiration. Numbing can occur within two minutes. Physicians use cocaine on membranes of the nose, pharynx, mouth and throat. However, the major usage of cocaine is through illicit, non-clinical use as a euphoriant (Palfai and Jankiewicz, 1997:311).

Effects of Cocaine

The hit experienced after administering the cocaine through the nasal cavity is felt very rapidly, within a few seconds. Most users feel a sense of euphoria shortly before the plasma concentrations drop. An intranasal dose of 25 to 50mg produces peak euphoria in fifteen to twenty minutes. This sense of well being is followed in forty five to sixty minutes by a 'coming down' period where the user feels lethargic, depressed, agitated and anxious. There is also a desire for more cocaine even though at that stage the level of cocaine in the brain may be depleted, while the plasma concentration is still high. The user can be in discomfort before the blood levels have declined. With intravenous usage, the effects are more intense, resulting in a 'rush' (Palfai and Jankiewicz, 1997:310).

Long term effects

Cardiac complications are common such as chest pain, myocardial ischaemia and infarction, myocarditis and aortic rupture. Cocaine also acts as a direct irritant to the respiratory airways producing a persistent cough and bronchial hyperactivity. The rapid rise in blood pressure that occurs after administration and concomitant impaired cerebral activity can result in intracranial haemorrhage and cerebral infarction. Seizures, sleep and eating disorders, sexual dysfunction like delayed ejaculation and orgasm and impotence are also common in chronic users. Psychiatric illnesses like acute or chronic psychosis, schizophrenia, depression and obsessive compulsive disorders also occur. Cocaine is also nephrotoxic and directly damages the kidneys. With chronic use, tolerance and habituation occur (White and Lambe, 2003:30-32).

Tolerance potential

Tolerance develops with continued use of cocaine. The duration of the effects of the drug is reduced and the user has to increase the amount of each dose or the frequency (Emmett and Nice, 1996:81).

Habituation potential

Users become psychologically dependent on the drug as the short term effects of the drug encourage the user to keep using the drug often. The 'coming down' period further propels the user to keep using the drug (Emmett and Nice, 1996:81).

Withdrawal effects

Terminating the use of cocaine is not very difficult if cocaine is used on an irregular basis. If it is used on a heavy and regular basis, the addiction can be difficult to

overcome. The feelings of anxiety, depression and the severe craving are difficult to treat (Emmett and Nice, 1996:81).

Overdose levels

Overdose can occur at low levels. Due to the unclear strength of a sample, it can be easy to overdose. Overdose results in cardiac and respiratory failure, leading to coma and death (Emmett and Nice, 1996:81).

2.14.1.2 <u>Methylphenidate hydrochloride</u>

Methylphenidate hydrochloride is a mild central nervous system (CNS) stimulant (Barondes, 2003). Methylphenidate hydrochloride is a white, odourless, fine crystalline powder that is freely soluble in water, methanol and alcohol (Drugs.com, 2012).

Methylphenidate hydrochloride is methyl α -phenyl-2-piperidineacetate hydrochloride and is a Piperidine derivative (Drugs.com, 2012).

The chemical formula for Methylphenidate hydrochloride is C₁₄H₁₉NO₂ HCL and the molecular structure is illustrated in Figure 3.

Figure 3: Molecular structure of Methylphenidate HCL (Drugs.com, 2012).

Approximately 85% of the world's methylphenidate hydrochloride is currently consumed in America (Tone and Watkins, 2007:132). Methylphenidate hydrochloride is marketed under trade names such as Concerta[®], Metadate[®], Methylin[®] and Ritalin[®] (Drugs.com, 2011).

History

Methylphenidate hydrochloride is a stimulant which is similar to amphetamines. It was discovered in 1954 by scientists at a Swiss drug company. It was then introduced in the United States in 1955 as a treatment for narcolepsy (Barondes, 2003:71).

Early advertisements portrayed tired, fatigued patients with a wide range of psychiatric disorders such as chronic fatigue, depression, and dementia. The information and visuals of methylphenidate hydrochloride advertisements throughout the 1950s and 1960s suggested it to be a drug that is useful in the treatment of most psychiatric diagnoses. While methylphenidate hydrochloride was advertised for adults exclusively, the use of other psychotropic drugs for behaviour problems in children has been ongoing since the 1920s (Tone and Watkins, 2007:132).

By the 1960s, many articles documented the benefits of methylphenidate hydrochloride over tranquilizers in the treatment of children's overactive and distracted behaviours. The term for this behaviour was called 'chronic brain syndrome'. Two years later, it was named Minimal Brain Dysfunction (MBD). MBD is a collective term for at least thirty eight other diagnostic terms. Methylphenidate hydrochloride was marketed to treat MBD, and in 1970 it was officially used for the treatment of children with MBD, the early term for Attention Deficit/Hyperactivity Disorder (ADHD) (Tone and Watkins, 2007:140-141).

Mechanism of action

Methylphenidate hydrochloride acts as a stimulant by rectifying the chemical deficiency in the brain. However, as with schizophrenia and depression, there is no direct evidence for an imbalance of a neurotransmitter in people with ADHD. Like amphetamines, methylphenidate hydrochloride binds to transporters that control the uptake of brain amines, like dopamine. Similar to amphetamines, intravenous methylphenidate

hydrochloride produces a surge of brain dopamine that can be very addictive. Methylphenidate hydrochloride also alters the signalling of serotonin and norepinephrine. However, there is no specific evidence regarding the mechanism whereby methylphenidate hydrochloride produces its mental and behavioural effects (Barondes, 2003:71-75).

Indications

Methylphenidate hydrochloride is used to treat Attention deficit/Hyperactivity disorders (Minimal Brain Damage) and narcolepsy (Holowenko, 1999:53).

Contraindications and warnings

Marked anxiety, tension, and agitation are contraindications to methylphenidate hydrochloride usage, as the drug may aggravate these symptoms. Methylphenidate hydrochloride is contraindicated in patients known to be hypertensive as it may decrease the effectiveness of drugs used to treat hypertension. Stimulant medications can also cause a modest increase in average blood pressure (about 2-4 mmHg) and average heart rate (about 3-6 bpm).

It is also contraindicated in patients with glaucoma, those that are allergic to the constituents of methylphenidate hydrochloride, and in patients with motor tics or with a family history or diagnosis of Tourette's syndrome.

Methylphenidate hydrochloride is contraindicated during treatment with monoamine oxidase inhibitors, and also within a minimum of fourteen days following discontinuation of a monoamine oxidase inhibitor (as a hypertensive crises may occur) (Drugs.com, 2012).

Administration of methylphenidate hydrochloride may exacerbate symptoms of behaviour disturbance and mental illnesses in patients with a pre-existing psychotic disorder.

Difficulties with accommodation and blurring of vision are also associated with stimulant treatment. Methylphenidate hydrochloride should not be taken by children under six years, since safety and efficacy in this age group has not been established. It is not known whether methylphenidate hydrochloride is excreted in human milk. Since many drugs are excreted in human milk, caution should be taken if methylphenidate hydrochloride is administered to a nursing woman. Chronic abusive use can lead to tolerance and psychological dependence with varying degrees of abnormal behaviour (Drugs.com, 2012).

Side effects

<u>CNS:</u> Nervousness, insomnia, dizziness, headache, dyskinesia, chorea, toxic psychosis, blurred vision.

Gastrointestinal: anorexia, nausea, weight loss, abdominal pain.

<u>Cardiovascular</u>: Increased or decreased pulse and blood pressure, tachycardia, angina, palpitations, arrhythmias.

Haematologic: Leukopenia, anaemia.

<u>Dermatological</u>: skin rash, urticaria, fever, arthralgia, exfoliative dermatitis, erythema multiforme with histopathological findings of necrotizing vasculitis, and thrombocytopenic purpura.

Other: Tolerance, psychological dependence (Drugs.com, 2012).

2.14.2 Hallucinogens

Hallucinogens (also known as psychotomimetics and psychedelics) are drugs that produce hallucinations and affect one's cognition and perception. Hallucinogen comes from the Latin word *alucinatio* which means wandering of the mind or attention.

Medically, it is defined as a sensory perception without an actual external stimulus. They can cause delirium or psychotic episodes of schizophrenia. Hallucinogens include ketamine, phencyclidine (PCP), Lysergic acid diethylamide (LSD) and 3,4methylenedioxymethamphetamine (MDMA) (Palfai and Jankiewicz, 1997:415-417).

A new term, entheogen, which is derived from a Greek word *entheos*, meaning 'God within,' has been introduced as these substances reveal or allow a connection to the 'divine within' (Vale, 2012:86).

2.14.2.1 LSD

Lysergic acid diethylamide (LSD) belongs to a class of substances called ergot alkaloids (Palfai and Jankiewicz, 1997:440). It is derived from ergot, *Claviceps purpurea*, a poisonous fungus that grows on rye and other grains (Palfai and Jankiewicz, 1997:440). This fungus yields the lysergic acid. The majority of LSD is manufactured on the west coast of America (Emmett and Nice, 1996:102). The LSD molecule consists of a tetracyclic ring (Passie, Halpern, Stichtenoth, Emrich and Hintzen, 2008:296). The chemical formula of LSD is C₂₀H₂₅N₃O and (Passie et al., 2008:296) and the molecular structure is illustrated in Figure 4.

<u>Figure 4</u>: Molecular structure of Lysergide (LSD) (European Monitoring Centre for Drugs and Drug Addiction. 2011b).

History

During famine time in the Middle Ages, the mouldy grains and rye were kept to make bread. Individuals who ingested infected grains suffered from a toxic condition called ergotism. This also occurred in grazing animals that ingested infected grains and rye. Symptoms included gangrene due to circulatory damage, convulsions, crawling sensations of the skin, vertigo, vomiting, diarrhea, delirium, psychosis and even mania (Palfai and Jankiewicz, 1997:441).

In 1582, ergot was used to induce labour contractions but was considered dangerous as it caused uterine spasms. In 1808, it entered the medicine fraternity and was confined to only treat bleeding after birth, as it stops blood flow (Palfai and Jankiewicz, 1997:411).

During the 1930s, lysergic acid, the first ergot alkaloid, was isolated (Palfai and Jankiewicz, 1997:442). In 1938, Albert Hoffmann, a Swiss chemist, started synthesizing other lysergic acid compounds (Emmett and Nice, 1996:100). He synthesized number twenty five in a series of new molecules (Palfai and Jankiewicz, 1997:442), hence the name LSD 25. He was hoping for an analeptic and circulatory and respiratory stimulant to be synthesized (Emmett and Nice, 1996:100). However, when the LSD 25 was tested on animals, they showed no physical effect and there were no reactions from them (Emmett and Nice, 1996:100). Hence, the drug was largely forgotten. In 1943, Hoffmann decided to make a new batch and retested it (Palfai and Jankiewicz, 1997:442). During this process, he accidentally ingested small quantities of it by licking his fingers. He then experienced the world's first LSD 'trip.' He recorded that the shapes of people and objects changed and he saw fantastic images with immense clarity and changing of colours (Emmett and Nice, 1996:100).

In the 1950s and 1960s, LSD was used as an experimental drug in psychiatric research (Passie et al., 2008:295) as it was thought to help patients vocalize their inner feelings (Emmett and Nice, 1996:101). In the 1950's, the CIA used it as a truth drug to aid their interrogation, but this practice was soon discontinued (Palfai and Jankiewicz,

1997:444). From the mid 1960s it became an illegal drug of abuse with widespread use that continues today (Passie et al., 2008:295).

Appearance

LSD initially appeared on the streets as a dilute, clear, colourless and odourless liquid that was placed with a dropper on a sugar cube and eaten. Pure LSD appears as small colourless crystals. Nowadays, LSD is impregnated onto sheets of absorbent paper. The sheets are divided into five millimeter squares. Each square is called a blotter, and is decorated with a small picture or symbol. The exact reasons for the pictures are unknown. Small tablets are also impregnated with the drug and are available in a variety of colours. These tablets are known as microdots (Emmett and Nice, 1996:102).

Methods of administration

LSD is normally taken orally by placing the paper square or pill in the mouth or in a drink. It is uncommon for it to be injected and snorted (Emmett and Nice, 1996:103).

Dosage

A moderate dose (75–150 μ gp.o.) of LSD is needed to significantly alter the state of consciousness (Passie et al., 2008:296).

Mechanism of action

There are a lot of complex interactions and speculation about LSD's working mechanisms, although its main effect is on serotonin neurotransmitter system. Serotonin (5-hydroxytryptamine; 5-HT) is involved in regulating sensation, sleep, attention and mood. It is produced by a small number of neurons, which then innervate 500, 000 other neurons. These neurons originate in the raphe nuclei (RN) of the midbrain. A major target of the neurons is the locus coeruleus (LC), which regulates the

release of norepinephrine, which controls the sympathetic nervous system. The LC also has neurons that expand into the cerebellum, thalamus, hypothalamus, cerebral cortex, and hippocampus while the RN expands its projections into the brainstem and the brain. The fact that the LC and the RN innervate virtually every part of the brain shows that serotonin can activate large portions of the brain from a relatively small area of origination. This can possibly explain the enormous range of effects of LSD in humans (Passie et al., 2008:305).

Generally, 5-HT is mainly an inhibitory neurotransmitter. When its activity is decreased, the next neuron is not inhibited and becomes more active. LSD acts as a 5-HT autoreceptor agonist on 5-HT1A receptors in the locus coeruleus, the raphe nuclei and the cortex. LSD also inhibits firing and serotonin release of these cells which may explain the actions of LSD by their disinhibition of these critical cells.

There is also evidence that LSD interacts with the dopaminergic systems. However, it is not known how these changes are involved in psychoactive effects of LSD (Passie et al., 2008:305-306).

Metabolism

The metabolism of LSD is rapid as it easily absorbed and crosses the placental and blood brain barrier (Palfai and Jankiewicz, 1997:448). If the drug is taken with a large meal, plasma concentrations of LSD are half as much as on an empty stomach. When a smaller meal is eaten, plasma levels can vary. The amount of the meal, as well as the pH of the stomach and duodenum wills influence the absorption of LSD (Passie et al., 2008:299).

The largest amount of LSD concentrates in the liver, the site of metabolism and biotransformation. The lowest concentration is in the brain. In the brain, the highest concentration is found in the visual area and the limbic system. Eighty percent of the

drug is excreted through the intestines and bile while the remainder passes unchanged (Palfai and Jankiewicz, 1997:448).

Biochemical changes

LSD significantly reduces urinary dopamine excretion (to 476 μ g per 24 h), but excretion of norepinephrine and serotonin are not affected. LSD induces a slight decrease in creatinine clearance, but no change in calcium clearance and serum calcium levels. No changes are detected in serum creatinine, plasma urea, plasma sodium, chloride, serum cholesterol and total lipids. Transaminase levels are also unchanged (Passie et al., 2008:298).

Effects

LSD intake involves a pattern of changes that is collectively known as a 'trip' in which the user goes through many mental and emotional experiences. Every LSD trip is unique for every individual who uses the drug (Palfai and Jankiewicz, 1997:450).

The physical effects of LSD are minor. Users experience pupillary dilation of the eyes; rising of blood glucose levels; blood pressure and pulse rate (Emmett and Nice, 1996:106). A 'trip' begins twenty minutes after ingestion, when the user begins to experience mood changes, abnormal body sensations, a decrease in sensory impressions, abnormal colour perception, space and time disorders and visual hallucinations. Objects assume auras, move or vibrate. Colours can be synaesthetically heard, and sounds can be experienced as lights and forms (Palfai and Jankiewicz, 1997:450). This is defined as a full state of hallucination or 'tripping' (Emmett and Nice, 1996:106). The nature of the 'trip' can be pleasant, unpleasant or terrifying. It can be a person's worst nightmare. If a person is stressed or depressed, they are more likely to have an unpleasant experience. If a person is in a good mood and relaxed, they are more likelyto experience a good 'trip'. The duration of the effects of LSD can vary between six and twenty four hours. As the effects of the drug begin to wear off, leaving

the user feeling tired and disorientated. The user will return to normal after a good sleep (Emmett and Nice, 1996:106-107).

There are typical sensory and psychological effects under the influence of a medium dose of LSD (100–200 μ gp.o.) (Passie et al., 2008:297):

Sensory alterations (visual, auditory, taste, olfactory, kinaesthetic)

Illusion;

Pseudo-hallucination;

Intensification of colour perception;

Metamorphosis-like change in objects and faces;

Intense (kaleidoscopic or scenic) visual imagery with transforming content.

Alterations of affectivity

Intensification of emotional experience: euphoria, dysphoria, anxiety, mood swing.

Alterations of thinking

Less abstract and more imaginative thought;

Broader and unusual association;

Attention span shortened.

Alterations of body perceptions

Change in body image.

Unusual inner perception of bodily processes.

Metamorphic alteration of body contours.

Memory changes

Re-experiencing significant biographical memories;

Hypermnesia;

Age-regression.

Mystical-type experiences.

Adverse effects

There are very few adverse physical effects with LSD use (Emmett and Nice, 1996:107). It are not addictive and there have been no documented human deaths from an LSD overdose (Passie et al., 2008:297).

There can be psychiatric complications following LSD ingestion. The most common unpleasant reaction is an episode of anxiety, despair, panic, with severe, terrifying thoughts and feelings, fear of losing control, fear of insanity or death. This would be considered a 'bad trip.' Other reactions may include temporary paranoia and depressive mood swings, or increase of psychic instability (Passie et al., 2008:307).

A major problem with LSD is the chance of the user experiencing a return of the hallucinatory state (Emmett and Nice, 1996:107). This is called a 'flashback' (Palfai and Jankiewicz, 1997:456). It is a spontaneous recurrence of a trip after a period of normalcy. These flashbacks can occur weeks, months or years after the person stopps using the drug (Palfai and Jankiewicz, 1997:456). They last for a shorter period of time than the original 'trip', but are as intense and unpleasant (Emmett and Nice, 1996:107). The mechanism of flashbacks is unknown. The Diagnostic and Statistical Manual of Mental Disorders, Version IV (DSM-IV) defines clinically significant flashbacks as 'Hallucinogen Persisting Perception Disorder' (Passie et al., 2008:307).

Clinical applications

Ergot alkaloids are used to induce birth labour and treat migraine headaches (Palfai and Jankiewicz, 1997:452).

Tolerance

Tolerance occurs when there is a decrease in responsiveness to a drug after repeated administration (Emmett and Nice, 1996:108). Tolerance to the effects of LSD can occur after a few moderate daily doses of LSD (Passie et al., 2008:306). Tolerance diminishes if the user abstains from the drug for a week (Emmett and Nice, 1996:108).

2.14.2.2 MDMA

MDMA is a methylated amphetamine molecule known chemically as 3, 4 methylenedioxymethamphetamine which is marketed under trade names like Ecstasy, XTC, Adam, Essence and Clarity (Palfai and Jankiewicz, 1997:320). It is classified as a stimulant and a synthetic hallucinogenic form of amphetamine (Emmett and Nice, 1996:114). LSD and MDMA are often taken together to increase the response to MDMA. This is known as 'candy flipping' (Vale, 2012:85).

The molecular formula of MDMA is C₁₁H₁₅NO₂ (Palfai and Jankiewicz, 1997:321) and the molecular structure is illustrated in Figure 5.

<u>Figure 5</u>: Molecular structure of MDMA (European Monitoring Centre for Drugs and Drug Addiction, 2011c).

Street names

"E", "disco burger", "disco biscuit", "love dove" and "rabbit" (Emmett and Nice, 1996:121).

History

MDMA was first synthesized in 1914 in Germany as an appetite suppressant, but it was never marketed commercially. During the 1970's, MDMA was used as an aid to psychotherapy, to relax people during counselling sessions. Due the side effects of MDMA, it was banned for medical use (Emmett and Nice, 1996:114).

However, in 1985 the use of MDMA boomed in Texas and was freely available at bars and convenience stores (Palfai and Jankiewicz, 1997:320). Soon, it appeared on the streets of the USA as its effects were described as a combination of LSD and amphetamines. It then acquired the name 'Ecstasy', as it described the effects of the drug. In the 1990's, it was associated with 'rave' parties and is known as the 'dance drug,' as it allows one to dance for hours and hours (Emmett and Nice, 1996:114).

Forms and appearance

Pure MDMA is a white powder. If it is commercially manufactured, the form depends on the manufacturer. There are about thirty different forms of MDMA tablets with different shapes, colours and patterns (Emmett and Nice, 1996:114-115).

Dosage

Doses range from 70 to 150mg. Smaller doses of 40mg can be taken at thirty minute intervals. However, the second dose only worsens the side effects (Palfai and Jankiewicz, 1997:321).

Mode of administration

MDMA is most commonly taken orally and swallowed which saves time and effort, compared to other drugs which require equipment or apparatus (Emmett and Nice, 1996:118). Snorting and the intravenous route are rare (Vale, 2012:86).

Mechanism of action

MDMA acts on various neurotransmitter systems. Its main action causes the release of serotonin (5-HT) as well as blocks the re-uptake of serotonin by synaptic vesicles that release it. It can cause damage to the serotonergic nerve endings (Palfai and Jankiewicz, 1997:321-323).

Effects

MDMA is a mild hallucinogen. The hallucinations are lower than LSD, with subtle changes in perception. The user feels alive, euphoric, blessed, grounded, more self-confident and self-accepting. There is a sense of emotional closeness, communication and bonding with others. They feel at peace with the world and empathy towards others. Being an amphetamine derivative, it provides feelings of energy and freedom, with no hunger (Emmett and Nice, 1996:117-118).

Usage may produce increased sweating, pulse rate, blood pressure, nausea, blurred vision and nystagmus (Palfai and Jankiewicz, 1997:322).

Side effects

A common side effect is stiffness and tension in the jaws, and teeth clenching. Nausea occurs thirty minutes after administering of the drug. Headaches, insomnia, feeling of coldness, tingling and numbing can occur. The pulse rate and blood pressure can rise during the first hour of use. There is a distinct hangover and other negative side effects on the second day after use (Palfai and Jankiewicz, 1997:323).

Small clots within the blood system can develop, which can migrate around the body. Prolonged or heavy use can lead to personality changes where the user can become depressed, irritable and obsessed with the attitude of others towards them. Users might

have to rely on the drug to provide happiness, as it can deplete the natural production of serotonin (Emmett and Nice, 1996:119-120).

Tolerance

A tolerance to MDMA can develop with repeated use and the user will have to increase the dose that they use to produce the same effect (Emmett and Nice, 1996:120). However, the potential to abuse the drug is limited as the desirable effects decline with increased dosage. Death is therefore rare, but possible in cardiac cases (Palfai and Jankiewicz, 1997:324).

Withdrawal effects

The users will not generally experience any physical symptoms. Heavy users can experience anxiety and depression (Emmett and Nice, 1996:121).

2.14.3 <u>Heroin</u>

Heroin belongs to a group called opioids which contain opiates. Opiates, according to the law, are referred to as narcotics. Heroin (diacetylmorphine) is a synthetic derivative of morphine as it is essentially a morphine molecule with two acetyl groups. Heroin is considered to be three times more potent than morphine. It has higher lipid solubility and is more rapidly absorbed into the brain than morphine. It is biotransformed into morphine in the brain (Palfai and Jankiewicz, 1997:373-374).

The chemical formula of Heroin is $C_{21}H_{23}NO_5$ (Snowdown, 2002) and the molecular structure is illustrated in Figure 6.

<u>Figure 6</u>: Molecular structure of Heroin (European Monitoring Centre for Drugs and Drug Addiction, 2011d).

Street names

"H", "horse", "smack", "hary", "skag" and "brown" (Emmett and Nice, 1996:148).

History

Heroin was produced by a London chemist, C. R. Alder Wright in 1874 by boiling morphine with acetic anhydride. Later, Heinrich Dreser of Friedrich Bayer reported on his experiments with heroin and named it *heroisch*, meaning 'a small, potent unit.' He endorsed it as a non-addictive analgesic that can be used for coughs, chest pain and pneumonia. It was marketed as Bayer Heroin in 1898 as a medicine for bronchitis, coughs and tuberculosis. In the early 19th century, addiction to heroin and the heroin black market was growing as heroin was cheap, compact, easy to smuggle and was being used socially. By the 1940s, heroin addiction was a major addiction in the world and it still maintains its place in the drug scene (Palfai and Jankiewicz, 1997:373-379).

Form and appearance

Heroin produced pharmaceutically is a fine, white powder. It is sold on the streets as a coarse powder, which can vary in colour from a creamy, pinky white, or various shades of brown to a dark coffee colour. Generally, the lighter the shade of brown, the better the quality of heroin. Street samples are usually twenty percent (20%) pure. The

remaining volume is made up by 'cutting' i.e. adding diluting agents that act as bulking elements such as caffeine, glucose or sugar (Emmett and Nice, 1996:139).

Methods of use

The most common method of administering heroin is by injection. The user normally receives the heroin in a powder form, which is then prepared into an injectable liquid. The powder is placed on a spoon and dissolved with an acidic liquid like lemon juice. First time users will inject heroin into muscle tissue, rather than into veins of the hand and arms. This is called skin popping. It is simpler and safer than intravenous injection. However, the effects from the drug are slower without the 'hit' that users want to experience. Most users start injecting into small veins that lie close to the skin surface. After a while, users will have to use deeper veins of the thigh, neck or stomach (Emmett and Nice, 1996:142-144).

Heroin can also be smoked. The powder can be mixed with tobacco or cannabis. Most smokers use a method called 'skagging' or 'chasing the dragon.' The heroin is placed on cooking foil and heated until it turns into small drops of liquid. It then emits thin strands of smoke which is collected, and inhaled with a tube. It is possible to use heroin orally by dabbing it into the mouth (Emmett and Nice, 1996:145).

Effects

Users will experience a 'hit' when the drug reaches the brain. There is an overpowering feeling of euphoria, a feeling of deep inner peace and then a dreamy, trance-like state. The users feeling of stress, anxiety and fear will disappear. As heroin is a powerful analgesic, it will remove all pain, cold and hunger. These feelings can last between two to six hours (Emmett and Nice, 1996:145).

Adverse effects

Users can experience nausea and vomiting. With high doses, their breathing rate and the level of consciousness can be reduced. Users will also be more susceptible to infections due to a weakened immune system (Emmett and Nice, 1996:146).

Tolerance

Tolerance develops quickly with repeated use as the body adapts to the effects of heroin, and the same dose produces weaker effects of the drug (Emmett and Nice, 1996:146).

Withdrawal effects

Sudden removal of the drug causes flu-like symptoms, aching muscles, severe cramps and stiff joints. The users' body temperature fluctuates with profuse sweating (Emmett and Nice, 1996:147). The mild symptoms of the withdrawal can be dramatically abolished by another dose of heroin. The users crave heroin at the very mildest feeling of 'being sick'. With time, they need more and more heroin to relieve the sickness and to achieve that feeling of satisfaction. Eventually users become fully addicted, using heroin three or four times a day (Goldstein, 2001:161).

Overdose potential

There are great risks of overdose. It can lead to respiratory depression, coma and eventually death (Emmett and Nice, 1996:147).

Treatment

The most effective treatment is long-term maintenance on methodone. It is not a heroin substitutes, but it stabilizes the chaotic fluctuations in neurochemistry that are induced

by heroin. It does not produce the "rush" or other effects that addicts seek in heroin. Naltrexone is an effective opioid antagonist that blocks the normal reaction of the part of the brain that produces the feeling of pleasure when heroin is taken. Buprenorphine is an opioidpartial agonist-antagonist and is the newest method of treatment for heroin addiction (Goldstein, 2001:176-177).

2.15 Biochemical Analysis of the drugs

MDMA and LSD have amphetamine like molecular structures (referred to as phenethylamines) and are therefore chemically related to amphetamines (Hanson et al., 2012:364). Amphetamine is a synthetic derivative of the phenylethylamine family, which differs as it contains a methyl group (-CH3) attached to the side chain (European Monitoring Centre for Drugs and Drug Addiction, 2011e).

<u>Figure 7</u>: Molecular structure of Amphetamine (European Monitoring Centre for Drugs and Drug Addiction. 2011f).

<u>Figure 8</u>: Molecular structure of Phenethylamine (European Monitoring Centre for Drugs and Drug Addiction. 2011f).

Phenethylamines drugs have varying degrees of hallucinogenic and CNS stimulant properties (Hanson et al., 2012:364). MDMA and LSD have more hallucinogenic properties than stimulating properties, with LSD having a psychedelic effect as well (Hanson et al., 2012:364-365).

Methylphenidate hydrochloride is also related to amphetamines, but only has a stimulating property (Hanson et al., 2012:299).

Therefore, LSD, MDMA and methylphenidate hydrochloride have common substructures such as amphetamines as well as phenethylamines (Hanson et al., 2012:364).

LSD does differ from MDMA and methylphenidate hydrochloride as it contains a diethylamide group with an indole ring (six-membered benzene ring fused to a five-membered nitrogen-containing pyrrole ring) (May, 1998).

Methylphenidate hydrochloride also differs as it is the only drug that has a piperidine derivative and contains the element chlorine (Drugs.com, 2012).

However, LSD, MDMA, methylphenidate hydrochloride, Heroin and Cocaine share some common substructures such as benzene rings (aromatic compounds) and amine groups (May, 1998).

2.16 Group analysis research at DUT

Group analysis using Sankaran's method has been conducted previously by homoeopathy Masters degree students in the Department of Homoeopathy, Durban University of Technology (DUT). There has been group analysis of Graminae (Wulfsohn, 2005), Fungi (Leisegang, 2007), Insecta (Vogel, 2007), Class Aves (Harkhu, 2011), Class Arachnida (Weston, 2010) and Salicaceae (Kasiparsad, 2012).

2.16.1 Challenges of the various studies

Considering the minimal literature available on Graminae, Fungi, Insecta, Class Aves, Class Arachnida and Salicaceae group, the information from these dissertations has made a positive impact in homoeopathic literature. However, there were several challenges encountered in applying the group analysis method. In the Class Arachnida

(Weston, 2010:153) and Fungi group (Leisegang, 2007:93) the researchers were unable to outline a central theme/essence or core of their respective groups as a whole. The research revealed less detailed mental, emotional and physical symptoms (Leisegang, 2007:93). This can be due to some remedies being recently proved and that the remedies are poorly represented in homoeopathic literature. Homoeopathic information needs to be more accessible and available in the various databases (Harkhu, 2011:96). Vogel (2007:128) states that it is important that the source material used for group analysis should be of an appropriate quality. The information should include original case material, provings or video tapes to ensure that the sensations are accurately portrayed.

When applying Sankaran's method, it is also important to understand a substance in several ways. This can include gaining knowledge on the toxicology, mythology, natural history and biology of a substance. Without incorporating all aspects of information, it can lead to false interpretations, bias and can even produce misleading results (Sankaran, 2005).

CHAPTER 3 RESEARCH DESIGN

3.1 Recreational Drug Remedies

The first step was to define the recreational drug group of remedies used in homoeopathy and that can be found in homoeopathic literature. The list of recreational drug remedies in homoeopathic literature was obtained from www.provings.info as this information was not represented in other homoeopathic literature or computer programs like Radar 10 or Encyclopaedia Homoeopathica (Archibel, 2005).

3.2 Sample selection

Due to the fact that information was extracted through a manual process, the remedies chosen could not be selected only in terms of rubrics listed in computerized programs and repertories. Remedies were chosen from those listed in Table 2 according to the following criteria:

- 1) The homoeopathic significance of each remedy;
- 2) The availability of proving's and representation in materia medica;
- The drug has a synthetic derivative;
- 4) The drug is commonly used.

<u>Table 2</u>: Recreational Drug remedies in homoeopathy (Provings.com, n.d.)

Drug Name	Homoeopathic Remedy	Classification of Drug	Group
Opium/Opium Poppy	Papaversomniferum/ Opium	Narcotic	Papaveraceae

Heroin	Heroinum	Narcotic	Papaveraceae	
Codeine	Codeinum	Narcotic	Papaveraceae	
Morphine	Morphinum	Narcotic	Papaveraceae	
Ethyl alcohol	Alcoholus	Depressant	Aliphatic Carbon Compounds	
Barbiturates: Phenobarbital	Phenobarbitalum	Depressant	Synthetic Drugs	
MDMA / Ecstasy	MDMA / Ecstasy	Stimulant and Hallucinogen	Synthetic Drugs	
Amphetamines: Mescaline	Anhalonium lewinii	Stimulant	Cactaceae	
Nicotine	Nicotinum	Stimulant	Solanaceae	
Methylphenidate	Methylphenidatum hydrochloricum	Stimulant	Synthetic Drugs	
hydrochloride	Tryaroomonoam			
Cocaine	Cocainum hydrochloricum	Stimulant	Erythroxylaceae	
Ephedrine	Ephidrinum	Stimulant	Gnetaceae Synthetic Drugs	
Cannabis Indica (Hashish)	Cannabis indica	Stimulant and depressant	Cannabaceae	
Lysergic acid diethylamide(LSD)	Lysergic acid diethylamide (LSD)	Hallucinogen	Synthetic Drug	
Coffee	Coffea cruda	Stimulant Rubiaceae		
Nutmeg	Nux moschata / Myristic afragrans	Stimulant Myristicaceae		
Fly Agaric	Agaricus muscarius	Hallucinogen	Agaricaceae	

These criteria were utilized because the group analysis method is mainly focused on characteristic, well-defined features which are poorly represented in the 'smaller' remedies (Sankaran, 2005).

A minimum of 5 remedies was selected as this is the smallest number to have been previously used in a group analysis study (Weston, 2010).

The selection process resulted in the following five remedies:

- Heroinum (Heroin);
- MDMA/Ecstasy (MDMA/Ecstasy);
- Methylphenidatum hydrochloricum (Methylphenidate hydrochloride);
- Cocainum hydrochloricum (Cocaine); and
- Lysergic acid diethylamide (Lysergic acid diethylamide: LSD).

3.3 Data processing

Information from various materia medicas, provings, Radar 10 and rubrics were used for extraction purposes. The selected remedies were subjected to a manual extraction and only rubrics that contained at least 2 of the selected remedies were utilized. The extraction process produced mental, physical and general symptoms.

3.4. Data analysis

3.4.1 <u>Determination of the common group sensation</u>

The selected rubrics were analyzed for common sensations in the group. All data was analyzed in terms of Sankaran's model of Vital Sensation. If the sensation was represented by a rubric that was present in at least 2 of the selected remedies, it was considered to be common to the group. Sensations from mental symptoms, general symptoms and symptoms particular to various parts of the body were included. The results are listed in Table 3 (Sensation rubrics for the synthetic recreational drug isolate group).

3.4.1.1 First order analysis

The extracted sensations were defined using a dictionary and thesaurus (Collins, 2006). The same text was used to identify synonyms relating to the sensation. The extracted common sensations and corresponding synonyms were subjected to a homoeopathic

literature search. This tested and confirmed the accuracy and validity of the selected set of sensations. This also ensured that the sensation relates to the group as a whole. This was termed the first order analysis.

3.4.1.2 Second order analysis

The approved sensations extracted from the first order analysis were subjected to a definition development process using a dictionary (Collins, 2006) and a synonyms development process using a Thesaurus (Collins, 2006). Each synonym was examined and homoeopathic literature was searched to test its validity. This was termed the second order analysis. This method verified the first order sensations, while the second order sensations could be established.

3.4.1.3 Third order analysis

If any new sensations emerged as a result of the second order analysis, these were then subjected to a third order analysis. The new sensations were also subjected to a literature search, allowing second order sensations to be verified and new third order sensations to be established. All synonyms and definitions are listed in **Appendix B** and **Appendix C** respectively.

The common extracted sensations were also analyzed according to their quantitative representation in the different sections of the homoeopathic materia medica. The extracted common sensations and the allocation of each remedy of the drug group in the homoeopathic materia medica are listed in section 4.3.

3.4.2. <u>Determination of the reactions to the common sensations of the group</u>

Once a set of common sensations of the group was identified, the reactions to these sensations were analyzed and divided into 3 categories: active, passive or compensatory reactions towards the sensation (Sankaran, 2005b:141).

Reactions to a particular sensation may result in actual actions, a desire to act and or the avoidance or lack of action. Each action can give rise to a related sensation and each sensation can stimulate a specific action, even if one does not actually act upon that action. In this manner, sensation and action (or the desire to act) are always equal and opposite (Sankaran, 2005b:130).

3.4.3 <u>Determination of the miasmatic classification of the group</u>

Each remedy of the group was individually studied and analyzed based on Sankaran's extended miasmatic model (Sankaran, 1997). Sankaran developed a miasmatic table (**Appendix A**) with a list of keywords which are related to a particular miasm. Sankaran's miasmatic model does not include the the AIDS miasm. However, he states that there are many more miasms that are yet to be discovered and the development of miasms is an evolving process (Sankaran, 1999:74). Hence, the keywords for the AIDS miasm are listed in **Appendix E**.

Literature from the homoeopathic materia medica, provings and rubrics were searched for those keywords.

If the keywords specific to a miasm dominate in a remedy, this may point to the relevant miasm which the remedy might belong to (Sankaran, 2005a). The individual characteristics and particular expression of each remedy was also analyzed, to determine the total miasmatic representation of each remedy.

CHAPTER 4 RESULTS AND DISCUSSION

4.1. Synthetic recreational drug isolate remedies in homoeopathy

Most remedies derived from synthetic recreational drug isolate sources are not well documented or comprehensively proven in homoeopathy. Provings of *LSD*, *MDMA*, *heroinum* and *Methylphenidatum hydrochloricum* have not yet been entered into the homoeopathic materia medicas or computer repertory programs like Radar 10 (Archibel, 2005). Only rubrics of *cocainum hydrocholricum* could be obtained from Radar 10. Hence, the group analysis could not be conducted with the traditional use of computer software. Instead, homoeopathic literature, including provings and rubrics, was manually searched.

This sample selection process outlined in Chapter 3 produced the following five remedies, which formed the basis for this study:

- Heroinum (Heroin);
- MDMA/Ecstasy (MDMA/Ecstasy);
- Methylphenidatum hydrochloricum (Methylphenidate hydrochloride);
- Cocainum hydrochloricum (Cocaine); and
- Lysergic acid diethylamide (Lysergic acid diethylamide: LSD).

4.2. Extraction of common rubrics

Rubrics for *LSD*, *MDMA*, *heroinum* and *methylphenidatum hydrochloricum* were obtained from provings of the individual remedies, while rubrics for *Cocainum hydrochloricum* were obtained from Synthesis 9.1 (Schroyens, 2004) and Radar 10

(Archibel S.A. 2005). From this rubric list, only those rubrics that contained at least two of the selected remedies were chosen for the extraction process and analysis of the common sensation. Thereafter, the rubrics were scanned for words representing sensations. Each sensation was subjected to a literature search to test its validity.

Sensation rubrics derived from the selected homoeopathic synthetic recreational drug isolate remedies are listed in the Table 3.

<u>Table 3</u>: Sensation rubrics for the synthetic recreational drug isolate group.

Sensation rubric	<u>Heroinum</u>	<u>LSD</u>	<u>MPH</u>	Cocainum hydrochloricum	<u>MDMA</u>
MIND - ANXIETY	Х	Х	Х	-	Х
MIND - AWKWARD	Х	Х	Х	-	
MIND - CLARITY of mind	Х	-	Х	-	Х
MIND - CONCENTRATION - difficult	Х	Х	Х	-	Х
MIND - CONFUSION of mind	X	Х	Х	-	-
MIND - DELUSIONS - pursued ; he was	X	-	-	X	Х
MIND – DELUSIONS- separated - World, from the – he is separated	Х	Х	х	-	-
MIND - DESPAIR	Х	Х	Х	-	-
MIND - DETACHED	Х	Х	Х	-	-
MIND - DULLNESS	Х	Х	Х	-	-
MIND - EMOTIONS - suppressed	Х	Х	Х	-	Х
MIND - EUPHORIA	X	Х	-	-	Х
MIND - EXCITEMENT	Х	Х	-	X	-
MIND - FEARLESS	Х	Х	-	X	Х
MIND - INDIFFERENCE, apathy	Х	Х	Х	Х	-
MIND - INDIFFERENCE , apathy - everything, to	Х	Х	Х	-	-

MIND - IRRITABILITY	Х	Х	Х	-	-
MIND - JEALOUSY	Х	Х	-	Х	-
MIND - MEMORY - weakness of memory	Х	Х	Х	-	-
MIND - OPTIMISTIC	-	Х	Х	-	Х
MIND - RESTLESSNESS	Х	Х	Х	-	Х
MIND - RESTLESSNESS - anxious	Х	Х	Х	-	-
MIND - SADNESS	Х	Х	Х	-	Х
MIND - SENSES - acute	Х	Х	-	-	Х
MIND - TRANQUILLITY , serenity, calmness	Х	Х	Х	-	Х
HEAD - PAIN	Х	-	Х	-	Х
HEARING - ACUTE	Х	Х	-	-	Х
FACE - HEAT - flushes	Х	Х	-	-	Х
MOUTH - ITCHING - palate	Х	Х	Х	-	
THROAT - DRYNESS	X	Х	-	X	X
STOMACH - NAUSEA	Х	Х	Х	-	Х
COUGH - DRY	X	Х	Х	-	-
SLEEP - SLEEPINESS	Х	Х	Х	-	-
SLEEP - SLEEPLESSNESS	Х	Х	-	Х	-
CHILL - CHILLINESS	-	Х	-	Х	Х
GENERALS - HEAT - flushes of	Х	Х	Х	-	-
GENERALS - HEAT - sensation of	Х	Х	Х	-	-
GENERALS - TREMBLING - externally	Х	Х	-	-	Х
GENERALS - WARM - amel.	Х	-	Х	-	Х
GENERALS - WEAKNESS	Х	Х	-	-	Х

4.3. Analysis of sensation

Each sensation was also analyzed according to its quantitative representation in the repertory. The sensations followed by the chapters of the repertory in which the individual remedies expressing those sensations can be found are listed below:

Lysergic acid diethylamide

Dryness: Skin, Eye, Face, Mouth, Throat, Cough, Chest, Larynx and Trachea,

Extremities

Dullness: Mind

Heaviness: Mind, Head, Eye, Extremities

Coldness: Mind, Head, Eye, Vision, Mouth, Back, Extremities, Skin, Perspiration,

Generals

Weakness: Mind, Extremities, Generals

Faintness: Generals

Acute: Mind, Vision, Hearing, Nose

Sensitive: Mind, Abdomen, Female Genitalia/Sex

Detached: Mind

Indifference - apathy: Mind

Anxiety: Mind, Vertigo, Throat, Stomach, Respiration, Chest

Fear: Mind, Dreams

Restlessness: Mind, Generals

Heat: Mind, Ear, Face, Chest, Back, Extremities, Skin, Generals

Warmth: Head, Perspiration, Generals

Anger: Mind, Dreams

Rage: Mind

Violence: Mind, Cough, Dreams

Numbness: Head, Mouth, Generals, Larynx and Trachea

Tingling: Head, Extremities, Female Genitalia/Sex

Itching: Eye, Nose, Mouth, Rectum, Chest, Skin, Extremities

Burning: Eye, Mouth

Heroinum

Dryness: Throat, Cough

Dullness: Mind

Heaviness: Mind, Vertigo, Head, Eye, Nose, Extremities, Sleep, Generals

Coldness: Nose, Mouth, Throat, Larynx and Trachea, Chest, Sleep, Extremities, Chill,

Generals

Weakness: Mind, Extremities, Generals

Faintness: Generals

Sensitive: Mind, Teeth, Chest, Skin, Generals

Acute: Mind, Hearing, Nose, Mouth

Detached: Mind

Indifference - apathy: Mind

Anxiety: Mind, Respiration, Chest, Sleep, Dreams

Fear: Mind

Restlessness: Mind, Sleep

Heat: Face, Mouth, throat, Chest, Extremities, Generals

Warmth: Throat, Generals

Anger: Mind, Dreams

Rage: Mind Violent: Mind

Numbness: Head, Generals

Tingling: Head, Face, Extremities

Burning: Nose, Mouth, Chest, Extremity

Itching: Eye, Nose, Mouth, Skin, Extremity

Methylphenidatum hydrochloricum

Dryness: Nose, Face, Extremities, Mouth, Cough, Skin

Dullness: Mind, Head

Heaviness: Eye, Generals

Coldness: Head, Cough, Generals, Extremities

Weakness: Mind, Generals

Sensitive: Mind

Acute: Mind, Vision, Hearing, Mouth

Detached: Mind Indifference: Mind

Anxiety: Mind, Chest

Fear: Mind

Restlessness: Mind, Dreams Heat: Head, Sleep, Generals Warmth: Cough, Generals

Fever: Fever, Cough, Extremities

Anger: Mind

Itching: Ear, Mouth, Larynx and Trachea

Tingling: Extremities, Throat

Burning: Eye, Extremities, Female Genitalia/Sex

Cocainum hydrochloricum

Dryness: Throat

Weakness: Mind

Indifference - apathy: Mind

Restlessness: Sleep

Heat: Back

Numbness: Head, Generals

Burning: Throat

MDMA

Dryness: Throat, Female Genitalia/Sex

Heaviness: Eye, Generals

Coldness: Generals
Weakness: Generals

Acute: Mind, Vision, Hearing, Mouth

Sensitive: Mind

Fear: Mind

Anxiety: Mind

Restlessness: Mind, Dreams

Warmth: Chest, Generals

Heat: Face, Generals

Anger: Mind

4.3.1 First order analysis

The sensations extracted from Table 3 were defined with the help of a dictionary (Collins, 2006) and synonyms were identified with the help of a thesaurus (Collins, 2006). The results can be found in **Appendix C** and **Appendix B** respectively. Sensations were only valid if their correlating synonyms could be found in the literature search. Sensations which appeared synonymous with each other, for example *indifference* and *apathy*, was taken as one sensation or theme. This prevented duplication of a single concept.

The extracted confirmed sensations and themes are shown summarized in Table 4.

<u>Table 4</u>: First order analysis from original sensations extracted.

Common/original sensations extracted	First order sensations/themes	
Itching	Burning, impatient, tingling, irritation/irritable, restlessness, irritable	
Restlessness	Impatience, activity, anxiety	
Fear	Anxiety	
Anger	Rage, fury, irritation	
Dryness	Dryness, thirsty	
Anxiety	Fear, Restlessness, suspicious	
Indifference	Apathy, coldness, detachment, neglected	
Heaviness	Numbness, dullness, sadness, seriousness	
Heat	Excitement, violence, fever, warmth, acute	
Tranquillity	Peaceful, calm, serenity	
Acute	Sensitive, violent, cutting	
Weakness	Difficulty, helplessness, faintness	

Corresponding synonyms for each of the above extracted sensations were listed using a thesaurus (Collins, 2006) (See Appendix B). Each sensation and the related synonyms were subjected to a literature search to verify their validity. If the sensations proved to be themes of the recreational synthetic drug isolate group, it was considered to be confirmed sensations of the group as an entirety. The common sensations confirmed through this process were: dryness, itching, fear, anger, restlessness, anxiety, indifference, heaviness, heat, acute and weakness

An example of each sensation/theme from the literature showing where the relevant sensation/theme is listed below:

4.3.1.1 <u>Dryness</u>

The effects of many recreational synthetic drugs are activation of the sympathetic nervous system (SNS). One of the symptoms produced is dryness. Dryness was present as a symptom throughout all five synthetic recreational drug remedies (Palfai and Jankiewicz, 1997:110).

Lysergic acid diethylamide

EYE - Dryness

EYE - PAIN - dryness of eyeballs, with

FACE - DRYNESS

FACE - DRYNESS - Lips

FACE - DRYNESS - Lips - licks them frequently

MOUTH - DRYNESS

MOUTH - DRYNESS - Palate

MOUTH - DRYNESS - Palate - air agg.; open

THROAT - DRYNESS

THROAT - DRYNESS - drinking does not amel.

LARYNX AND TRACHEA - DRYNESS

COUGH - DRY

CHEST - DRYNESS

SKIN - Dry

EXTREMITIES - DRYNESS - Hands

EXTREMITIES - DRYNESS - Hands - palm

Heroinum

THROAT - DRYNESS

COUGH - DRY

COUGH - DRY - tickling, from - Larynx; in

Methylphenidatum hydrochloricum

NOSE – DRYNESS - inside

NOSE - DRYNESS - night

MOUTH - DRYNESS - thirst; with

FACE - DRYNESS - Lips

FACE - DRYNESS - Lips - night

FACE - DRYNESS - Lips - waking; on

EXTREMITIES - DRYNESS - Hands

EXTREMITIES - DRYNESS - Hands - Palms

EXTREMITIES - DRYNESS - Hands - Palms - right

COUGH - DRY

COUGH - DRY- constant, almost

SKIN - DRY - perspire; inability to

Cocainum hydrochloricum

THROAT - DRYNESS

MDMA

THROAT - DRYNESS

FEMALE GENITALIA - DRYNESS, vagina

4.3.1.2 <u>Dullness</u>

People tend to experience feelings of dullness, drowsiness and mental clouding during administration of heroin (Hanson, 2012:258).

Lysergic acid diethylamide

MIND - DULLNESS

MIND - DULLNESS - company, in

MIND - DULLNESS - company, in - can only relate to one person at a time

MIND - DULLNESS - evening - amel.

MIND - DULLNESS - heard, what he has

MIND - DULLNESS - thinking - slowly

Heroinum

MIND - DULLNESS

Methylphenidatum hydrochloricum

MIND - DULLNESS

MIND - DULLNESS - headache, with

HEAD - PAIN - dull pain

Cocainum hydrochloricum

No data available for this sensation in the literature.

MDMA

No data available for this sensation in the literature.

4.3.1.3 <u>Heaviness</u>

A sign of heroin use is the heavy feeling of the extremities (Hanson, 2012:262).

Heroin and cocaine use during pregnancy has been associated with a reduced birth weight where the babies are under-weight and malnourished (Hanson, 2012:312).

Lysergic acid diethylamide

MIND - DELUSIONS - body - heavy and thick; body has become

MIND - DELUSIONS - heavy; is

MIND - DELUSIONS - clouds - black cloud enveloped her; a heavy

HEAD - HEAVINESS - Forehead

HEAD - HEAVINESS - Occiput

EYE - HEAVINESS

EXTREMITIES - HEAVINESS

EXTREMITIES - HEAVINESS - Foot

EXTREMITIES - HEAVINESS - Hip

EXTREMITIES - HEAVINESS - Leg

EXTREMITIES - HEAVINESS - Leg - right

EXTREMITIES - HEAVINESS - Shoulder

EXTREMITIES - HEAVINESS - Shoulder - right

EXTREMITIES - HEAVINESS - Thigh

EXTREMITIES - HEAVINESS - Thigh - sitting, while - amel.

EXTREMITIES - HEAVINESS - Upper arm

EXTREMITIES - HEAVINESS - Upper limbs

EXTREMITIES - HEAVINESS - Upper limbs - left

Heroinum

MIND - DELUSIONS - heavy; is

MIND - HEAVINESS; sensation of

VERTIGO - ACCOMPANIED by - Head - heaviness in head

HEAD - HEAVINESS

HEAD - HEAVINESS - Forehead

EYE - HEAVINESS - Lids

NOSE - HEAVINESS

SLEEP - HEAVY

EXTREMITIES - HEAVINESS

EXTREMITIES - HEAVINESS - Lower limbs

GENERALS - HEAVINESS

GENERALS - HEAVINESS - afternoon

Methylphenidatum hydrochloricum

EYE - HEAVINESS - Lids GENERALS - HEAVINESS

Cocainum hydrochloricum

No data available for this sensation in the literature.

MDMA

No data available for this sensation in the literature.

4.3.1.4 <u>Coldness</u>

Drugs like Heroin, when taken, can remove feelings of coldness. However, coldness can also be an after effect of the drug (Emmett and Nice, 1996:145).

Lysergic acid diethylamide

MIND - DELUSIONS - skull - open to the cold, is

HEAD - PAIN - cold - air - amel.

HEAD - PAIN - wind - cold

EYE - COLDNESS

EYE - COLDNESS - left

VISION - LIGHT - cold

MOUTH - PAIN - Palate - cold air - agg.

BACK - COLDNESS

BACK - COLDNESS - cold - air - as from

EXTREMITIES - COLDNESS - Foot

EXTREMITIES - COLDNESS - Foot - evening

EXTREMITIES - COLDNESS - Foot - evening - 18 h

EXTREMITIES - COLDNESS - Foot - sitting - while

PERSPIRATION - COLD

SKIN - COLDNESS - heat; with internal

GENERALS - COLD - air - agg.

GENERALS - COLD - air - aversion to

GENERALS - COLD - feeling - Bones

Heroinum

NOSE - COLDNESS

MOUTH - SALIVA - cool

THROAT - COLDNESS, sensation of

THROAT - COLDNESS, sensation of - Esophagus

THROAT - COLDNESS, sensation of - peppermint, as from

LARYNX AND TRACHEA - COLD sensation - Larynx

CHEST - COLDNESS - internal

EXTREMITIES - COLDNESS

EXTREMITIES - COLDNESS - Foot - Hands, and

EXTREMITIES - COLDNESS - Hands

EXTREMITIES - COLDNESS - Hands - Feet, and

SLEEP - SLEEPLESSNESS - coldness, from

CHILL - ICY COLDNESS of the body

GENERALS - FOOD and DRINKS - cold drink, cold water - desire

GENERALS - HEAT - sensation of - alternating with sensation of cold

GENERALS - TREMBLING - Externally - coldness - with

Methylphenidatum hydrochloricum

HEAD - HEAT - coldness - Body; with coldness of

HEAD - HEAT - coldness - Extremities; with coldness of

COUGH - COLD - drinks - agg.

EXTREMITIES - COLDNESS

GENERALS - COLD - air - agg.

GENERALS - HEAT - sensation of - alternating with sensation of coldness

Cocainum hydrochloricum

No data available for this sensation in the literature.

MDMA

GENERALS - FOOD and DRINKS - cold drink - desire

4.3.1.5 Weakness and faintness

Weakness and faintness are symptoms that are associated with the withdrawal of drug usage (Palfai and Jankiewicz, 1997).

Lysergic acid diethylamide

MIND - MEMORY - weakness of memory

MIND - MEMORY - weakness of memory - dates, for

MIND - MEMORY - weakness of memory - happened, for what has

MIND - MEMORY - weakness of memory - places, for

MIND - MEMORY - weakness of memory - proper names

EXTREMITIES - WEAKNESS - Hand

EXTREMITIES - WEAKNESS - Hand - grasping objects, on

EXTREMITIES - WEAKNESS - Hand - writing - while

EXTREMITIES - WEAKNESS - Upper arm

GENERALS - WEAKNESS

GENERALS - WEAKNESS - exertion - slight; from

GENERALS - WEAKNESS - restlessness, with

GENERALS - WEAKNESS - standing, on

GENERALS - WEAKNESS - sudden

GENERALS - FAINTNESS

GENERALS - FAINTNESS - exertion, on

GENERALS - FAINTNESS - walking - air; in open

Heroinum

MIND - MEMORY - weakness of memory

MIND - MEMORY - weakness of memory - dates, for

MIND - MEMORY - weakness of memory - happened, for what has

MIND - MEMORY - weakness of memory - objects; for where he/she has put

MIND - MEMORY - weakness of memory - words; for

EXTREMITIES - WEAKNESS - Leg

EXTREMITIES - WEAKNESS - Leg - afternoon

EXTREMITIES - WEAKNESS - Lower limbs

GENERALS - WEAKNESS

GENERALS - WEAKNESS - accompanied by - nausea

GENERALS - WEAKNESS - reaction, with lack of

GENERALS - FAINTNESS

Methylphenidatum hydrochloricum

MIND - MEMORY - weakness of memory

MIND - MEMORY - weakness of memory - done; for what he just has

MIND - MEMORY - weakness of memory - names

MIND - MEMORY - weakness of memory - numbers

MIND - MEMORY - weakness of memory - objects; for where he has put

GENERALS - WEAKNESS - morning

GENERALS - WEAKNESS - accompanied by - activity of mind

GENERALS - WEAKNESS - dinner - amel.

GENERALS - WEAKNESS - fever - during - agg.

GENERALS - WEAKNESS - pain; from

Cocainum hydrochloricum

MIND - WILL- weakness of

MDMA

GENERALS - WEAKNESS

4.3.1.6 Acute and sensitive

Users of hallucinogens such as LSD and MDMA have heightened and exaggerated senses such as touch and vision etc (Hanson, 2012:354).

Lysergic acid diethylamide

MIND - SENSES - acute

MIND - SENSES - acute - detail; to minutest

VISION - ACUTE

VISION - ACUTE - clear, bright and lucid

HEARING - ACUTE

HEARING - ACUTE - distant sounds

HEARING - ACUTE - music, to

HEARING - ACUTE - noises, to

HEARING - ACUTE - voices and talking

NOSE - SMELL - acute

NOSE - SMELL - acute - delight in smells

MIND - SENSITIVE

MIND - SENSITIVE - colors, to

MIND - SENSITIVE - cruelties, when hearing of

MIND - SENSITIVE - external impressions, to all

MIND - SENSITIVE - light, to

MIND - SENSITIVE - music, to

MIND - SENSITIVE - nature and natural objects, to

MIND - SENSITIVE - noise, to

MIND - SENSITIVE - noise, to - sudden

MIND - SENSITIVE - noise, to - voices, to

ABDOMEN - SENSITIVE, skin

FEMALE GENITALIA/SEX - SENSITIVENESS - Uterus

Heroinum

MIND - SENSITIVE

MIND - SENSITIVE - criticism; to

MIND - SENSITIVE - nature and natural objects, to

MIND - SENSITIVE - noise, to

MIND - SENSITIVE - opinion of others; to the

MIND - SENSITIVE - sensual impressions, to

MIND - SENSITIVE - want of sensitiveness

TEETH - SENSITIVE, tender

TEETH - SENSITIVE, tender - brushing

CHEST - SENSITIVE - Mammae

SKIN - SENSITIVENESS

SKIN - SENSITIVENESS - touch; to

GENERALS - TOBACCO - aversion to - smell of tobacco; sensitive to

MIND - SENSES - acute

HEARING - ACUTE

NOSE - SMELL - acute

MOUTH - TASTE - acute

Cocainum hydrochloricum

No data available for this theme in the literature.

Methylphenidatum hydrochloricum

No data available for this theme in the literature.

MDMA

MIND - SENSES - acute

VISION - ACUTE

HEARING - ACUTE

HEARING - ACUTE, noises, to

MOUTH - TASTE, acute

MIND - SENSITIVE - touch, to

MIND - SENSITIVE, noise, to

4.3.1.7 Detachment, indifference, apathy

Indifference, apathy and feelings of detachment are general withdrawal symptoms associated with synthetic recreational drugs (Palfai and Jankiewicz, 1997).

Lysergic acid diethylamide

MIND - DETACHED

MIND - DETACHED - daily activity, from

MIND - DETACHED - family, from his

MIND - DETACHED - people, from

MIND - INDIFFERENCE, apathy

MIND - INDIFFERENCE, apathy - appearance; to his personal

MIND - INDIFFERENCE, apathy - business affairs, to

MIND - INDIFFERENCE, apathy - company, society - to

MIND - INDIFFERENCE, apathy - duties; to

MIND - INDIFFERENCE, apathy - evening

MIND - INDIFFERENCE, apathy - everything, to

MIND - INDIFFERENCE, apathy - external things; to

MIND - INDIFFERENCE, apathy - family, to his

MIND - INDIFFERENCE, apathy - joy; to

MIND - INDIFFERENCE, apathy - joyless

MIND - INDIFFERENCE, apathy - pain - to pain

MIND - INDIFFERENCE, apathy - pleasure, to

MIND - INDIFFERENCE, apathy - taciturn

MIND - INDIFFERENCE, apathy - window; looks hours out of

Heroinum

MIND - DETACHED

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MIND - INDIFFERENCE, apathy
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MIND - INDIFFERENCE, apathy - accompanied by - desire for feeling

MIND - INDIFFERENCE, apathy - agreeable things; to

MIND - INDIFFERENCE, apathy - business affairs, to

MIND - INDIFFERENCE, apathy - children, to her

MIND - INDIFFERENCE, apathy - condition; to his

MIND - INDIFFERENCE, apathy - duties; to

MIND - INDIFFERENCE, apathy - duties; to - domestic, to

MIND - INDIFFERENCE, apathy - ennui, with

MIND - INDIFFERENCE, apathy - everything, to

MIND - INDIFFERENCE, apathy - external impressions; to

MIND - INDIFFERENCE, apathy - external things; to

MIND - INDIFFERENCE, apathy - family, to his

MIND - INDIFFERENCE, apathy - intellectual occupation; to usual

MIND - INDIFFERENCE, apathy - irritating, disagreeable things; to

MIND - INDIFFERENCE, apathy - joyless

MIND - INDIFFERENCE, apathy - life, to

MIND - INDIFFERENCE, apathy - loved ones, to

MIND - INDIFFERENCE, apathy - others, toward

MIND - INDIFFERENCE, apathy - pain - to pain

MIND - INDIFFERENCE, apathy - parents; to

MIND - INDIFFERENCE, apathy - pleasure, to

MIND - INDIFFERENCE, apathy - suffering; to

MIND - ANXIETY - alternating with - indifference

MIND - ANXIETY - alternating with - indifference - as if all her conscious anxiety

Methylphenidatum hydrochloricum

MIND - DETACHED

MIND - INDIFFERENCE

MIND - INDIFFERENCE - everything, to

MIND - INDIFFERENCE - joyless

Cocainum hydrochloricum

MIND - INDIFFERENCE, apathy

MIND- INDIFFERENCE, appearance, to his personal

MDMA

No data available for this theme in the literature.

4.3.1.8 Anxiety, fear, restlessness

Taking drugs can remove feelings of anxiety, restlessness and fear. However, these feelings can also occur as a result of ceasing to use the drugs or after administering the drugs (Palfai and Jankiewicz, 1997).

Lysergic acid diethylamide

MIND - ANXIETY

MIND - ANXIETY - alternating with - cheerfulness

MIND - ANXIETY - anticipation; from

MIND - ANXIETY - causeless

MIND - ANXIETY - conscience; anxiety of

MIND - ANXIETY - evening

MIND - ANXIETY - fear; with

MIND - ANXIETY - flushes of heat - during

MIND - ANXIETY - future, about

MIND - ANXIETY - others, for

MIND - ANXIETY - riding, while

MIND - ANXIETY - salvation, about

MIND - ANXIETY - speaking, when

MIND - ANXIETY - speaking, when - company, in

MIND - ANXIETY - waking, on

MIND - STARTING, startled - anxious

VERTIGO - ANXIETY, during

THROAT - ANXIETY and apprehension in throat

STOMACH - ANXIETY

RESPIRATION - ANXIOUS

CHEST - ANXIETY in

MIND - FEAR

MIND - FEAR - alone, of being

MIND - FEAR - death, of

MIND - FEAR - ghosts, of

MIND - FEAR - happen, something will

MIND - FEAR - insanity

MIND - FEAR - observed, of her condition being

MIND - FEAR - robbers, of

MIND - FEAR - suffocation, of

MIND - FEAR - suffocation, of - night

MIND - FEAR - trifles, of

MIND - ANXIETY - fear; with

DREAMS - FEAR - panic,

MIND - RESTLESSNESS

MIND - RESTLESSNESS - anxious

MIND - RESTLESSNESS - busy

MIND - RESTLESSNESS - evening

MIND - RESTLESSNESS - walking, while - amel.

GENERALS - RESTLESSNESS

Heroinum

MIND - ANXIETY

MIND - ANXIETY - alone; when

MIND - ANXIETY - alternating with - contentment

MIND - ANXIETY - alternating with - indifference

MIND - ANXIETY - alternating with - indifference - as if all her conscious anxiety had gone into her subconscious and her conscious was anxiety free

MIND - ANXIETY - business; about

MIND - ANXIETY - children - about his

MIND - ANXIETY - conscience; anxiety of

MIND - ANXIETY - dark; in

MIND - ANXIETY - dreams; on waking from frightful

MIND - ANXIETY - family; about his

MIND - ANXIETY - future, about

MIND - ANXIETY - future, about - day; about the coming

MIND - ANXIETY - waking, on

RESPIRATION - ANXIOUS

CHEST - ANXIETY in

SLEEP - ANXIOUS

SLEEP - SLEEPLESSNESS - anxiety, from

SLEEP - WAKING - frequent - anxiety, with

DREAMS - ANXIOUS

DREAMS - ANXIOUS - as if all her conscious anxiety had gone into her subconscious

MIND - FEAR - bed - of the

MIND - FEAR - control; losing

MIND - FEAR - dark, of

MIND - FEAR - duty - neglect his duty; to

MIND - FEAR - failure, of

MIND - FEAR - happen, something will

MIND - FEAR - misfortune, of

MIND - FEAR - narrow place, in

MIND - FEAR - opinion of others, of

MIND - FEAR - sleep - go to sleep; fear to

MIND - FEAR - sleep - go to sleep; fear to - dream, lest she

MIND - ACTIVITY; desires - restless

MIND - RESTLESSNESS

MIND - RESTLESSNESS - anxious

MIND - RESTLESSNESS - conscience, of

MIND - RESTLESSNESS - waking, on

ABDOMEN - RESTLESSNESS, uneasiness, etc.

SLEEP - RESTLESS

Methylphenidatum hydrochloricum

MIND - ANXIETY

MIND - ANXIETY - family; about his

MIND - ANXIETY - future, about

CHEST - ANXIETY in - rising from chest

MIND - FEAR - cancer; of

MIND - FEAR - memory would fail; that his

MIND - FEAR - robbers, of

MIND - FEAR - talking - say something wrong; lest he should

MIND - RESTLESSNESS

MIND - RESTLESSNESS - internal

DREAMS - CHILDREN; about - restless children

MDMA

MIND - ANXIETY

MIND -ANXIETY, causeless

MIND -FEAR, control, losing

MIND - FEAR, insanity

MIND - RESTLESSNESS

DREAMS - restless

Cocainum hydrochloricum

SLEEP - Restless

4.3.1.9 Heat, warmth, fever

Activation of the sympathetic nervous system can produce hyperthermia, which leads to sensations of heat, warmth, and the development of fever, especially with the use of Cocaine (Palfai and Jankiewicz, 1997:112). Indians living in the Andes, who chewed coca leaves, can live comfortably in thirty (30) degrees Fahrenheit, 10000 feet above sea level (Emmett and Nice, 1996:72).

Lysergic acid diethylamide

MIND - ANXIETY - flushes of heat - during

EAR - HEAT - Meatus

FACE - HEAT

FACE - HEAT - flushes

FACE - PERSPIRATION - heat, during

MALE GENITALIA/SEX - HEAT

CHEST - HEAT - Heart, in region of

CHEST - HEAT - morning, on waking

BACK - HEAT - Cervical region

EXTREMITIES - HEAT - Hand

EXTREMITIES - HEAT - Upper limbs

SKIN - COLDNESS - heat; with internal

GENERALS - HEAT - flushes of

GENERALS - HEAT - flushes of - daytime

GENERALS - HEAT - flushes of - exertion, from least

GENERALS - HEAT - flushes of - extending to - upwards

GENERALS - HEAT - flushes of - perspiration - anxiety; and

GENERALS - HEAT - flushes of - sleep - during

GENERALS - HEAT - lack of vital heat

GENERALS - HEAT - sensation of

GENERALS - HEATED, becoming

HEAD - PAIN - warm - room -amel.

PERSPIRATION - WARM

GENERALS - WARM - desire for warmth

FEVER - ALTERNATING with - chills

Heroinum

FACE - HEAT

FACE - HEAT - flushes

EAR - HEAT

EAR - HEAT - right

MOUTH - HEAT

THROAT - HEAT

THROAT - HEAT - cough, after

THROAT - HEAT - extending to - Stomach

CHEST - HEAT

CHEST - HEAT - flushes

CHEST - PAIN - heat, during

EXTREMITIES - HEAT - Foot

EXTREMITIES - HEAT - Hand

EXTREMITIES - HEAT - Hand - dry

GENERALS - HEAT - flushes of

GENERALS - HEAT - flushes of - evening

GENERALS - HEAT - flushes of - perspiration - with

GENERALS - HEAT - flushes of - room, in

GENERALS - HEAT - lack of vital heat

GENERALS - HEAT - sensation of

GENERALS - HEAT - sensation of - alternating with sensation of cold

THROAT - PAIN - drinks - warm - amel.

GENERALS - FOOD and DRINKS - warm drinks - desire

GENERALS - FOOD and DRINKS - warm drinks - desire - hot

GENERALS - WARM - amel.

GENERALS - WARM - stove - desire

Methylphenidatum hydrochloricum

HEAD - HEAT - coldness - Body; with coldness of

HEAD - HEAT - coldness - Extremities; with coldness of

SLEEP - SLEEPLESSNESS - heat - during

GENERALS - HEAT - flushes of

GENERALS - HEAT - lack of vital heat

GENERALS - HEAT - sensation of

GENERALS - HEAT - sensation of - alternating with sensation of coldness

GENERALS - HEAT - sensation of - Upper part of body

COUGH - WARM - drinks - amel.

GENERALS - WARM - air - amel.

GENERALS - WARM - amel.

EXTREMITIES - PAIN - fever - during - agg.

FEVER - FEVER, heat in general

FEVER - NIGHT FEVER - INTENSE heat

FEVER - PERSPIRATION - heat; with COUGH - LOOSE - fever; during

MDMA

GENERALS - HEAT, flushes alternating, chills

FACE - HEAT, flushes

CHEST - WARM

GENERALS - WARM, amel

Cocainum hydrochloricum

BACK - HEAT, extending to- up the back

4.3.1.10 Anger, rage, fury, violence

Withdrawal of drug usage can result in an emotional imbalance. This results in a variety of behaviours such as rage, anger and fury and being violent (Palfai and Jankiewicz, 1997).

Lysergic acid diethylamide

MIND - ANGER

MIND - ANGER - love; from disappointed

MIND - ANGER - pains - about

MIND - ANGER - respiration difficult; with

MIND - ANGER - sudden

MIND - ANGER - violent

DREAMS - ANGER

MIND - RAGE, fury

MIND - RAGE, fury - violent

MIND - VIOLENCE - aversion to

MIND - VIOLENT

COUGH - VIOLENT

DREAMS - VIOLENCE

Heroinum

MIND - ANGER - alternating with - tranquility

MIND - ANGER - contradiction; from

MIND - ANGER - disorder; about

MIND - ANGER - easily

MIND - ANGER - himself; with

MIND - ANGER - morning - waking; on

MIND - ANGER - violent

MIND - ANGER - waking; on

MIND - IMPATIENCE - anger, with

DREAMS - ANGER

MIND - RAGE, fury

MIND - RAGE, fury - cursing, with

MIND - VIOLENT

Methylphenidatum hydrochloricum

MIND - ANGER

Cocainum hydrochloricum

No data available for this theme in the literature.

MDMA

No data available for this theme in the literature.

4.3.1.11 **Numbness**

Overdose symptoms and toxicity of drugs can produce numbness and tingling. Cocaine applied locally also produces numbness (Palfai and Jankiewicz, 1997:324).

Lysergic acid diethylamide

HEAD - NUMBNESS; sensation of - Forehead

HEAD - PAIN - numbness; with

MOUTH - NUMBNESS

MOUTH - NUMBNESS - Palate

MOUTH - NUMBNESS - Tongue

LARYNX AND TRACHEA - NUMBNESS - trachea

GENERALS - NUMBNESS - externally

Heroinum

GENERALS - NUMBNESS - Affected parts; of

GENERALS - NUMBNESS - Externally

HEAD - NUMBNESS; sensation of - Forehead

HEAD - NUMBNESS; sensation of - Forehead - evening - extending to - Nose; bone of

HEAD - NUMBNESS; sensation of - Vertex

Cocainum hydrochloricum

GENERALS - NUMBNESS, externally EXTREMITIES -NUMBNESS, fingers

MDMA

No evidence for this theme in the available literature.

Methylphenidatum hydrochloricum

No data available for this theme in the literature.

4.3.1.12 Tingling, itching, burning

Signs of heroin use can be itching, scratching and sensation of tingling (Hanson, 2012:259).

Lysergic acid diethylamide

HEAD - TINGLING

FEMALE GENITALIA/SEX - TINGLING, voluptuous

EXTREMITIES - TINGLING

EXTREMITIES - TINGLING - Fingers

EXTREMITIES - TINGLING - Fingers - fourth

EXTREMITIES - TINGLING - Fingers - right

EXTREMITIES - TINGLING - Foot

EXTREMITIES - TINGLING - Hand

EYE - ITCHING

EYE - ITCHING - left

NOSE - ITCHING

NOSE - ITCHING - Inside

MOUTH - ITCHING - Palate

RECTUM - ITCHING

RECTUM - ITCHING - Anus; around

CHEST - ITCHING - Axilla

CHEST - ITCHING - Mammae - nipples

CHEST - ITCHING - Mammae - nipples - right

EXTREMITIES - ITCHING - Elbow - bend of

EXTREMITIES - ITCHING - Forearm

EXTREMITIES - ITCHING - left

EXTREMITIES - ITCHING - Leg

EXTREMITIES - ITCHING - Thigh

EXTREMITIES - ITCHING - Upper limbs

SKIN - ITCHING

SKIN - ITCHING - bathing - warm - agg.

SKIN - ITCHING - spots

EYE - PAIN - burning

EYE - PAIN - burning - right

MOUTH - PAIN - burning - Palate

Heroinum

HEAD - TINGLING - Vertex

HEAD - TINGLING - Vertex - sides - left

HEAD - TINGLING - Vertex - sides - right

NOSE - TINGLING - Tip

FACE - TINGLING - Lips - extending to - Nose

EXTREMITIES - TINGLING - Foot

EXTREMITIES - TINGLING - Foot - standing, while

EXTREMITIES - TINGLING - Hand

EXTREMITIES - TINGLING - Leg

EXTREMITIES - TINGLING - Upper limbs

EYE - ITCHING

NOSE - ITCHING - Nostrils

NOSE - ITCHING - Tip

MOUTH - ITCHING

MOUTH - ITCHING - Palate

EXTREMITIES - ITCHING - Lower limbs

EXTREMITIES - ITCHING - Thigh

EXTREMITIES - ITCHING - Wrist

SKIN - ITCHING

SKIN - ITCHING - eruptions - without

NOSE - PAIN - burning, smarting - Root

MOUTH - PAIN - burning

MOUTH - PAIN - burning - Lips - Inside of

MOUTH - PAIN - burning - Tongue

CHEST - PAIN - burning

CHEST - PAIN - burning - Mammae - left

CHEST - PAIN - burning - Mammae - Under

EXTREMITIES - PAIN - burning - Hip - left

Methylphenidatum hydrochloricum

THROAT - TINGLING

EXTREMITIES - TINGLING - Feet - Heels

EXTREMITIES - TINGLING - Feet - Heels - left

EAR - ITCHING

EAR - ITCHING - left ear

MOUTH - ITCHING - Palate

LARYNX AND TRACHEA - ITCHING - Larynx

EYE - PAIN - burning

FEMALE GENITALIA/SEX - PAIN - Vagina - coition - during - burning

EXTREMITIES - PAIN - Hands - Palms - burning

EXTREMITIES - PAIN - Hands - burning

Cocainum hydrochloricum

THROAT - PAIN, pharynx, burning

MDMA

No data available for this theme in the literature

4.3.1.13 Tranquillity

MDMA users can report feelings of affection, tranquillity and peace (Hanson, 2012:365).

Lysergic acid diethylamide

MIND - TRANQUILLITY, serenity, calmness

Heroinum

MIND - TRANQUILLITY, serenity, calmness

MIND - TRANQUILLITY, serenity, calmness - rain, from heavy

Methylphenidatum hydrochloricum

MIND - TRANQUILLITY (= calmness / serenity)

MIND - TRANQUILLITY - stressful events-during

Cocainum hydrochloricum

No data available for this theme in the literature.

MDMA

MIND - TRANQUILLITY, serenity, calmness

4.3.2. Second order analysis

The first order sensations were defined using a dictionary (Collins, 2006) and related synonyms were identified using a thesaurus (Collins, 2006). New, relevant synonyms were used and were subjected to a literature search. The confirmed synonyms were confirmed as second order sensations.

Table 5 shows a list of the first order sensations and the second order sensations/themes.

<u>Table 5</u>: Second order analysis from the first order sensations/themes.

First order sensations or themes	Second order sensations/themes				
Impatient	Irritated, intolerant, anxious, excitement. hurry				
Irritation	Aggravate, rage, impatient, itchy, anger				
Detached	Indifference, separate, isolate, alone, forsaken				
Sensitive	Irritable, acute, touchy, sore, raw, difficult, secretive				

The researcher observed that several second order sensations 'go full circle' to the original common sensations extracted, thus confirming the first order sensations/themes.

4.3.2.1 Impatience

Withdrawal symptoms of Cocaine include being impatient, agitated, restless and anxious (Hanson, 2012:310).

Lysergic acid diethylamide

MIND - HURRY, haste

MIND - HURRY, haste - unconcerned, but

Heroinum

MIND - IMPATIENCE

MIND - IMPATIENCE - anger, with

MIND - IMPATIENCE - children; about his

MIND - IMPATIENCE - trifles, about

Methylphenidatum hydrochloricum

MIND - IMPATIENCE

Cocainum hydrochloricum

No data available for this theme in the literature.

MDMA

No data available for this theme in the literature.

4.3.2.2 Irritability

Irritability can occur as a withdrawal symptom, or it can be experienced after administering a drug (Palfai and Jankiewicz, 1997:311).

Lysergic acid diethylamide

MIND - IRRITABILITY

MIND - IRRITABILITY - causeless

MIND - IRRITABILITY - children, towards

MIND - IRRITABILITY - dependency, at her own

MIND - IRRITABILITY - husband; towards

MIND - IRRITABILITY - menses - during

MIND - IRRITABILITY - noise, from

MIND - IRRITABILITY - trifles, from

MIND - IRRITABILITY - working, when

EYE - IRRITATION

Heroinum

MIND - IRRITABILITY

MIND - IRRITABILITY - afternoon

MIND - IRRITABILITY - discouragement; with

MIND - IRRITABILITY - disturbed, when

MIND - IRRITABILITY - family, to her

MIND - IRRITABILITY - menses - before

MIND - IRRITABILITY - questioned, when

MIND - IRRITABILITY - taciturn

GENERALS - IRRITABILITY, physical - lack of

Methylphenidatum hydrochloricum

MIND - IRRITABILITY

MIND - IRRITABILITY - everything causes

MIND - IRRITABILITY - helplessness from

MIND - IRRITABILITY - trifles, from

COUGH - IRRITATION; from - Larynx; in

MDMA

MIND- IRRITABILITY

Cocainum hydrochloricum

No data available for this theme in the literature.

4.3.2.3 Excitement and exhilaration

Excitement and exhilaration are some of the effects and reasons for the usage of drugs. These sensations occur due to changes in the various neurotransmitters like dopamine serotonin etc in the brain (Emmett and Nice, 1996).

Lysergic acid diethylamide

MIND - EXCITEMENT

MIND - EXCITEMENT - alternating with - sadness

MIND - EXCITEMENT - alternating with - tranquillity

MIND - EXCITEMENT - company, in

MIND - EXHILARATION - air, in open

MIND - EXHILARATION - blissful

Heroinum

MIND - EXCITEMENT

MIND - EXCITEMENT - desire for

Cocainum hydrochloricum

MIND - EXCITEMENT

MDMA

No data available for this theme in the literature.

Methylphenidatum hydrochloricum

No data available for this theme in the literature.

4.3.2.4 Alone, forsaken, isolated, separated

The after effects of drugs can lead to feelings of separation, isolation and being forsaken. These symptoms often tempt the user to use the drug again to alleviate these sensations (Palfai and Jankiewicz, 1997).

Lysergic acid diethylamide

MIND - COMPANY - aversion to - desire for solitude

MIND - COMPANY - aversion to - fear of being alone; yet

MIND - DELUSIONS - alone, being - dead and still; and all about her were

MIND - DELUSIONS - alone, being - no one else exists

MIND - DELUSIONS - alone, being - world; alone in the

MIND - FEAR - alone, of being

MIND - DELUSIONS - forsaken; is

MIND - FORSAKEN feeling

MIND - FORSAKEN feeling - isolation, sensation of

MIND - DELUSIONS - separated - body - mind are separated; body and

MIND - DELUSIONS - separated - body - soul; body is separated from

MIND - DELUSIONS - separated - body - spirit had separated from body

MIND - DELUSIONS - separated - he were separated from himself

MIND - DELUSIONS - separated - he were separated from himself - life, and his own

MIND - DELUSIONS - separated - thoughts are separated from him; strange

MIND - DELUSIONS - separated - world, from the - he is separated

Heroinum

MIND - ANXIETY - alone; when

MIND - DELUSIONS - alone, being

MIND - DELUSIONS - alone, being - world; alone in the

MIND - DELUSIONS - forsaken; is

MIND - FORSAKEN feeling

MIND - FORSAKEN feeling - isolation; sensation of

MIND - FORSAKEN feeling - joyless, feels

MIND - DELUSIONS - separated - himself; he were separated from

MIND - DELUSIONS - separated - world; from the - he is separated

Methylphenidatum hydrochloricum

MIND - DELUSIONS - separated - body - mind are separated; body and

MIND - DELUSIONS - separated - world; from the - he is separated

MIND - DELUSIONS - separated - world; from the - he is separated - bubble with; a

MDMA

No data available for this theme in the literature.

Cocainum hydrochloricum

No data available for this theme in the literature.

4.3.3 Third order analysis

Some second order sensations/themes led to third order sensations. The synonyms and definitions of the second order sensations/themes provided new keywords for the third order search. Once the synonyms were confirmed by the literature, they were taken as confirmed third order sensations.

Table 6 shows a list of the second order sensations/themes and the third order sensations/themes.

<u>Table 6</u>: Third order analysis from second order sensations

Second order sensations or themes	Third order sensations/themes			
Sore	Angry, raw, aching, burning, irritable, sensitive			
Raw	sore, red, bloody, cold, chill, sensitive, haemorrhage			
Difficult	Hard, awkward			
Secretive	Reserved			

4.3.3.1 **Sore and raw**

Lysergic acid diethylamide

HEAD - PAIN - sore

HEAD - PAIN - sore - Forehead

HEAD - PAIN - sore - Forehead - eyes; above

HEAD - PAIN - sore - Forehead - spots, in

EYE - PAIN - sore

EYE - PAIN - sore - foreign body; as from

MOUTH - PAIN - sore - Palate

MOUTH - PAIN - sore - Palate - swallowing saliva

MOUTH - PAIN - sore - Tongue

MOUTH - PAIN - sore - Tongue - sides - left

MOUTH - PAIN - sore - Tongue - tip

ABDOMEN - PAIN - sore - Spleen

RECTUM - PAIN - soreness

FEMALE GENITALIA/SEX - PAIN - sore - Uterus

FEMALE GENITALIA/SEX - PAIN - sore - Uterus - pressure

CHEST - PAIN - sore, bruised

CHEST - PAIN - sore, bruised - lying - agg.

CHEST - PAIN - sore, bruised - Mammae

CHEST - PAIN - sore, bruised - Mammae - menses - before

CHEST - PAIN - sore, bruised - Mammae - stairs, going up and down

CHEST - PAIN - sore, bruised - morning

CHEST - PAIN - sore, bruised - Sternum

CHEST - PAIN - sore, bruised - Sternum - morning

EXTREMITIES - PAIN - sore, bruised - Toes - first

LARYNX AND TRACHEA - PAIN - rawness - Larynx

Heroinum

HEAD - PAIN - sore - Vertex

EYE - PAIN - sore

EYE - PAIN - sore - left

FACE - PAIN - sore, bruised - Jaws - Lower

FACE - PAIN - sore, bruised - Jaws - Lower - right

FACE - PAIN - sore, bruised - Lips

MOUTH - PAIN - sore - Palate

TEETH - PAIN - sore, bruised

THROAT - PAIN - sore

THROAT - PAIN - sore - eating - amel.

THROAT - PAIN - sore - Esophagus

THROAT - PAIN - sore - left

THROAT - PAIN - sore - right

ABDOMEN - PAIN - sore

ABDOMEN - PAIN - sore - Iliac region

ABDOMEN - PAIN - sore - pressure - agg.

FEMALE GENITALIA/SEX - PAIN - sore

FEMALE GENITALIA/SEX - PAIN - sore - Ovaries

FEMALE GENITALIA/SEX - PAIN - sore - Uterus

GENERALS - PAIN - sore, bruised

GENERALS - PAIN - sore, bruised - Joints, in

GENERALS - PAIN - sore, bruised - Muscles, in

DREAMS - AMOROUS - raw

Methylphenidatum hydrochloricum

EAR - PAIN - sore EAR - PAIN - sore - right

Cocainum hydrochloricum

No data available for this theme in the literature.

MDMA

THROAT- PAIN, raw, as if LARYNX AND TRACHEA – PAIN, rawness, larynx

4.3.3.2 Hard

Lysergic acid diethylamide

FACE - ERUPTIONS - hard
RECTUM - HEMORRHAGE from anus - stool - hard stool; from
STOOL - HARD
STOOL - HARD - blood, with

Methylphenidatum hydrochloricum

STOOL - HARD
STOLL - HARD - followed by- soft stool

Cocainum hydrochloricum

No data available for this theme in the literature.

MDMA

No data available for this theme in the literature.

Heroinum

No data available for this theme in the literature.

4.3.3.3 Awkward

Lysergic acid diethylamide

MIND - AWKWARD

EXTREMITIES - AWKWARDNESS

EXTREMITIES - AWKWARDNESS - Fingers

EXTREMITIES - AWKWARDNESS - Hands

Heroinum

MIND - AWKWARD

MIND - AWKWARD - drops things

MIND - AWKWARD - strikes against things

EXTREMITIES - AWKWARDNESS

EXTREMITIES - AWKWARDNESS - Hands - drops things

Methylphenidatum hydrochloricum

MIND - AWKWARD

Cocainum hydrochloricum

No data available for this theme in the literature.

MDMA

No data available for this theme in the literature.

4.3.3.4 Reserved, secretive

Lysergic acid diethylamide

MIND - SECRETIVE

Heroinum

MIND - RESERVED

MIND - SECRETIVE

Methylphenidatum hydrochloricum

MIND - RESERVED

MDMA

No data available for this theme in the literature.

Cocainum hydrochloricum

No data available for this theme in the literature.

4.3.3.5 Difficult

Lysergic acid diethylamide

MIND - ANGER - respiration difficult; with

MIND - CONCENTRATION - difficult

MIND - CONCENTRATION - difficult - abstract subjects; except on

MIND - CONCENTRATION - difficult - attention, cannot fix

MIND - CONCENTRATION - difficult - conversation, during

MIND - CONCENTRATION - difficult - food, when preparing

MIND - CONCENTRATION - difficult - one subject; on

MIND - CONCENTRATION - difficult - studying

MIND - STUDYING - difficult

RECTUM - HEMORRHAGE from anus - stool - difficult stool; from

RESPIRATION - DIFFICULT

RESPIRATION - DIFFICULT - abdomen, as from

RESPIRATION - DIFFICULT - ascending

RESPIRATION - DIFFICULT - exertion - after

RESPIRATION - DIFFICULT - sitting - bent - forward

RESPIRATION - DIFFICULT - walking

EXPECTORATION - DIFFICULT

Heroinum

EYE - OPENING the eyelids - difficult

RESPIRATION - DIFFICULT

RESPIRATION - DIFFICULT - hurried, if

DREAMS - DIFFICULTIES - journeys, on

Methylphenidatum hydrochloricum

MIND - CONCENTRATION - difficult

MIND - CONCENTRATION - difficult - driving; while

MIND - CONCENTRATION - difficult - studying (= reading)

EXPECTORATION - DIFFICULT

RESPIRATION - DIFFICULT - inspiration

SLEEP - WAKING - difficult

MDMA

No data available for this theme in the literature.

Cocainum hydrochloricum

No data available for this theme in the literature.

4.3.3.6 Red, bloody, hemmorhage

Lysergic acid diethylamide

MIND - COLORS - red - desire for

EYE - DISCOLORATION - red

EYE - DISCOLORATION - red - Lids - edges of

FACE - DISCOLORATION - red

FACE - DISCOLORATION - red - evening

FACE - DISCOLORATION - red - excitement

FACE - ERUPTIONS - red

FACE - ERUPTIONS - red - Cheeks

FACE - ERUPTIONS - red - Chin

MOUTH - DISCOLORATION - Tongue - red

FEMALE GENITALIA/SEX - MENSES - bright red

DREAMS - COLORED - red

MIND - DELUSIONS - blood - sees

NOSE - EPISTAXIS

NOSE - EPISTAXIS - blood - bright

NOSE - EPISTAXIS - left

NOSE - EPISTAXIS

NOSE - EPISTAXIS - blood - bright

NOSE - EPISTAXIS - left

MOUTH - BLEEDING - Gums

MOUTH - BLEEDING - Gums - easily

RECTUM - HEMORRHAGE from anus

RECTUM - HEMORRHAGE from anus - stool - after

RECTUM - HEMORRHAGE from anus - stool - difficult stool; from

RECTUM - HEMORRHAGE from anus - stool - hard stool; from

STOOL - HARD - blood, with

FEMALE GENITALIA/SEX - LEUKORRHEA - bloody

GENERALS - LOSS - blood; of

Heroinum

FACE - ERUPTIONS - red - Cheeks

MOUTH - BLEEDING - Gums

MOUTH - BLEEDING - Gums - cleaning them, when

Methylphenidatum hydrochloricum

THROAT - DISCOLORATION - redness - Tonsils

NOSE - DISCHARGE - bloody

NOSE - EPISTAXIS

NOSE - EPISTAXIS - blowing the nose agg.

Cocainum hydrochloricum

RECTUM - HAEMORRHAGE, from anus

MDMA

No data available for this theme in the literature.

4.4 Summary of Data Analysis

4.4.1 Sensations

The extraction process generated several sensations and themes that appeared common amongst the selected remedies. Sensations and themes were included if they were found in at least two of the selected remedies. The different sensations/ themes that represent the synthetic recreational drug isolate remedies are Listed in Table 7.

<u>Table 7</u>: Groups of sensations obtained through the extraction process

Separated	Weakness	Anxiety	Heat	Dryness	Excitement	Sensitive	Anger
Isolated	Faintness	Restlessness	Warmth		Euphoria	Acute	Rage
Alone	Indifference	Fear	Fever		Elation	Sore	Fury
Forsaken	Apathy	Irritation	Red		Exhilaration		Violent
Detached	Numbness	Impatient			Blissful		
Neglected					Ecstasy		
					Cheerful		
					Carefree		
					Laughing		
					Content		

Table 8 includes proposed themes/sensations to describe the central sensation, passive, and active as well as compensatory reactions.

<u>Table 8</u>: Proposed sensations/themes and reactions of the homoeopathic remedies belonging to the synthetic recreational drug isolate group

Sensation	Passive Reaction	Active Reaction	Compensation	
Anxiety	Heaviness	Anger	Euphoria	
Restlessness	Numbness	Rage	Ecstasy	
Fear	Dullness	Violent	Elation	
Excitement	Faintness	Impatient	Tranquillity	
Dryness	Weakness	Irritable		
Indifference	Coldness	Acute		
Isolation				

4.4.2 Themes

- 1. Anxiety.
- 2. Dryness.
- 3. Euphoria, ecstasy, elation, excitement.
- 4. Coldness.
- 5. Indifference, apathy.
- Nervous affection –increased activity, numbness, restlessness, weakness, tingling, increased sensitivity.
- 7. Isolation, detachment, separation.
- 8. Fearlessness (although it is not a prominent theme, it is present through all the remedies except in Methylphenidatum hydrochloricum).
- 9. Tranquillity, serenity and calmness.
- 10. Loquacity is present in all five remedies.
- 11. There is a general desire for sweets present in all remedies except in MDMA.
- 12. Common physical affections of the remedies include:
 - a) A common sensation of dryness in the throat;

- b) Diminished appetite;
- c) Distension of the abdomen; and
- d) Sleeplessness.

4.5 Miasmatic classification

The five selected remedies were classified into specific miasms based on Sankaran's miasmatic model (Sankaran, 1997). Each remedy was categorized as a particular miasm if the literature showed a clear predominance of the themes associated with that miasm. Some remedies showed themes belonging to more than one miasm. The miasmatic keywords used to determine the miasms are listed in **Appendix A and Appendix E.** Certain words have been italicised in relation to the relevant keyword of a particular miasm.

4.5.1 Lysergic acid diethylamide

<u>AIDS</u> miasm seems to predominate in this remedy. There are several traits of the AIDS miasm present in the remedy, particularly that of merging, which is typical of the AIDS miasm with its lack of boundaries.

Merging

Delight in merging with another (God, human, animal, plant or stone) or deep fear of it. Merging of Senses, merging with Music.

I felt as if the universe had been passed into the neurons of my brain and engraved in my genetics.

Nature, Animals - Immersion of awareness in inanimate objects, animating them.

Connection

"Feeling of confidence in conversation with people. Feel tuned in to a higher level of communication. Feel more at ease with my body. I feel confident in my nonverbal communication." 01P 12 XX.XX NS.

"Sense of belonging and community with the group today, felt really at ease with them, much more than usual. Don't feel so independent and self contained." 02P 02 15.00 NS.

Disconnection

"I felt very disconnected from people and found great solace in being alone with nature. There was a deeply spiritual aspect to it, and at times a real beauty in my isolation." (Prover 1.)

"Disconnected to whole process of proving. Disconnected from my emotional process. Disconnected from others around me." (Prover 3.)

"Increasing sense of 'indifference' and not caring, or cannot be bothered to relate symptoms, etc." 02P 02 15.00 NS.

"Feel spaced out and apathetic." 02P 07 XX.XX NS.

Detached

MIND - DETACHED

MIND - DETACHED - daily activity, from

MIND - DETACHED - family, from his

MIND - DETACHED - people, from

Isolation, desire to be alone

"Wanting to be alone - feeling uncomfortable in a room of fellow provers. Wanted to go to a quiet room somewhere." 01P 01 XX.XX NS.

"Feeling lonely, forsaken and abandoned." 01P 31 XX.XX NS.

MIND - COMPANY - aversion to - desire for solitude.

MIND - COMPANY - aversion to - fear of being alone; yet.

Nature, animals

"Notice flocks of birds, their movements, patterns and numbers. Feel high, as if my cares have all receded." 02P 01 17.30 NS.

"Nature feels very close to me - enhanced connection with it. Particularly noticed the birds - ravens, crows and pheasants." 02P 02 07.30 NS.

"Felt strong magical connection with Nature." 02P 03 XX.XX NS.

MIND - NATURE - loves

Boundaries

MIND - DELUSIONS - boundaries - between dimensions are thinning

MIND - DELUSIONS - boundaries - inner and outer realities inverted

MIND - DELUSIONS - boundaries - personal - dissolved - between self and child

MIND - DELUSIONS - boundaries - personal - dissolved - between self and family and friends

MIND - DELUSIONS - boundaries - personal - dissolved - she did not know who he was

MIND - DELUSIONS - connected, is - oneness with his fellow man and the whole of the universe, a feeling of

MIND - DELUSIONS - boundaries - personal - dissolved

Confusion

MIND - CONFUSION of mind - identity, as to his

MIND - CONFUSION of mind - identity, as to his - boundaries, and personal

MIND - CONFUSION of mind - identity, as to his - depersonalization

"Delusion that the telephone keeps ringing." 08P 25 XX.XX NS.

"I'm writing numbers backwards, i.e. the 6 before the 1 when writing 16." 05P 16 XX.XX NS.

There is also a theme of travel in the AIDS miasm. The lack of boundaries encourages one to travel. The idea of local and distant becomes one (Fraser, 2002:171). This is of relevance as the experience of taking LSD is often referred to as a 'trip'.

MIND - TRAVELLING - desire for

(Rubrics and proving data from Norland, 1999.)

4.5.2 Heroinum

The researcher is of the view that Heroinum belongs to the Cancer and Sycotic miasms.

Cancer miasm

MIND - INDUSTRIOUS, mania for work

"I became obsessive about cleaning and tidying up." 01P 02 XX.XX NS.

"Felt my life is in order and under control." 11P 03 XX.XX NS.

"Feel calm, in control and happy." 03P 15 XX.XX NS.

MIND - FEAR - control; losing

"Feel I have to take responsibility at work." 10P 07 XX.XX NS.

"I was irritable with everybody because of the chaos." 01P 02 XX.XX NS.

MIND - CHAOTIC

"Decided to clean and polish the house to put things in *order* and calm the mind." 03P 03 XX.XX NS.

MIND - ORDER - desire for

MIND - DISORDER, sensitive to

"I'm a *compulsive* list maker and finished everything and ticked it off. Being in *control* of events and on top of everything is very important to me. Also knowing that the

house is tidy makes me feel good in myself - I hate untidiness and mess." 03P 19 XX.XX OS

MIND - DESIRES - full of desires - grandeur; desire for

MIND - DESIRES - full of desires - unattainable things; desire for

Sycotic miasm

"Friend leaves me in charge of bus with valuable antiques on it. I return to bus to find have left keys in the door and some things are missing. *Guilt.* Let myself down. Do I cover up or confess." 10P 17.

"Feelings of guilt and restlessness." 02P 07 XX.XX NS.

"Thoughts of abandonment, betrayal, loss, guilt." 15P 05 09.00 NS.

"Fear of forgetting something important. Shame of it." 10P 03 XX.XX NS.

MIND - SHAMEFUL

DREAMS - SHAMEFUL

"Unusually frustrated, angry and unforgiving with myself when things go wrong." 02P 23 XX.XX NS.

"I am doubting everything about myself." 08P 12 XX.XX NS.

"Feelings of suspicion about my new patient." 14P 04 XX.XX NS.

MIND - AILMENTS FROM - embarrassment

MIND - AILMENTS FROM - reproaches

MIND - AILMENTS FROM - shame

MIND - DELUSIONS - body - ugly; body looks

MIND - EMOTIONS - suppressed

MIND - MEMORY - weakness of memory

MIND - SECRETIVE

Warts

SKIN - WARTS

"Wart drops off." 14P 06 XX.XX NS.

"Verrucas are coming to the surface and seem drier." 05P 11 XX.XX CS.

(All rubrics and proving data from Snowdown, 2002.)

4.5.3 Methylphenidatum hydrochloricum

The Tubercular miasm seems to predominate in this remedy.

Tubercular miasm

"Instead of the irritability there is a sensation of power. Mind is very sharp. Pick up everything very quickly." Prover 1 12c day 22.

"Feel the mind is sharp and fast. I react fast. Talk and think fast." Prover 1 12c day 13.

MIND - CONCENTRATION - difficult

MIND - MENTAL POWER - increased

"Feeling of happiness and optimism." Prover 2 MT day 1.

"Im a bit restless." Prover 5 MT day 5.

"Inner restlessness and tension." Prover 1 30c day 3.

MIND - RESTLESSNESS

MIND - RESTLESSNESS - internal

"Chills and shivers." Prover 9 30c day 44.

"I became more chilly." Prover 8 30c day 2.

"I was a bit chilly." Prover 8 30c day 28.

FEVER - FEVER, heat in general

FEVER - NIGHT

"Very fatigued - had to sit down." Prover 8 30c day 1 4.5 hrs after the remedy.

"I'm generally fatigued and weak." Prover 11 30c day 23.

"Craving for sweets came back." Prover 5 MT day 9.

"Disturbing cough without expectoration. Dry cough." Prover 1 12c day 8.

"Ceaseless cough, dry." Prover 9 MT day 10.

"Suffocating cough. No expectoration but I can feel both lungs in the back when I cough." Prover 1 12c day 10.

COUGH - DRY

COUGH - DRY - constant, almost

"Feel like my respiration is not 100% fine. Like in *asthma* [prover has asthma] I can't inhale fully 4.5 hrs after the remedy." Prover 8 30c.

RESPIRATION - ASTHMATIC

"I woke up soaking in *perspiration* including the beddings. The perspiration is especially in the back and legs." Prover 9 MT day 11.

FEVER - PERSPIRATION - heat; with

PERSPIRATION - SLEEP - during - agg.

MIND - ACTIVITY - accompanied by - weakness general

MIND - AIR; in open -amel

MIND - MUSIC - desire for

"I feel good and enjoy listening to music." Prover 9 MT day 6

"Had epistaxis." Prover 8 30c day 54.

NOSE - EPISTAXIS

NOSE - EPISTAXIS - blowing the nose agg.

THROAT - INFLAMMATION - follicular

THROAT - INFLAMMATION - Tonsils - left

"There's a *fungus* on both feet on the toes- its itching, it is an old symptom for him."

Prover 12 MT day 14.

(Rubrics and proving data was obtained from an email from Michael Chein on 4 October 2011.)

4.5.4 MDMA

The AIDS miasm appears to predominate in this remedy.

AIDS miasm

Loss of appetite; anorexia (MDMA is related to the slimming pill).

Dryness of the mouth, throat and vagina.

Lack of boundaries can result in inappropriate relationships or bonding that is not suitable and can be harmful.

Subjects feel more aware, 'grounded' and at peace.

Many subjects reported that they were more *communicative*. Emotional warmth, lack of emotional barriers.

All senses are enhanced; especially of touch and sound.

Clarity of mind.

Dispersion; Release of 'Body Armour'.

Oversensitive to environmental influences.

Extreme sensitivity of the whole nervous system.

(Rubrics and proving data was obtained from an email from Dr Marion Weston on 11 July 2012.)

4.5.5 Cocainum hydrochloricum

The main miasm of *Cocainum hydrochloricum* is unclear; however there are features of the cancer, leprosy and sycotic miasm.

Cancer Miasm

MIND - DEEDS - great deeds; sensation as if he could do

MIND - AMBITION - increased

MIND - INDUSTRIOUS

GENERALS - FOOD and DRINKS - sweets - desire

GENERALS - INDURATIONS - Glands, of - foreign bodies; sensation of small

Leprosy Miasm

MIND - DELUSIONS - abused, being

MIND - DELUSIONS - body - parts - absent; parts of body are

MIND - DELUSIONS - bugs and cockroaches; of

MIND - DELUSIONS - bugs; sees

MIND - DELUSIONS - worms

MIND - DELUSIONS - worms - covered with; he is

MALE GENITALIA/SEX - ABSENT, sensation as if penis were

SKIN - WORMS; sensation of - Under the skin

SKIN - BUGS; sensation of

Sycotic Miasm

MIND - AUDACITY

MIND - AMBITION - increased

MIND - DELUSIONS - persecuted - he is persecuted

MIND - DELUSIONS - pursued; he was

MIND - DELUSIONS - pursued; he was - enemies, by

(Rubrics from Radar 10, Archibel S.A., 2005.)

CHAPTER 5 ANALYSIS OF SYNTHETIC RECREATIONAL DRUG ISOLATE GROUP REMEDIES

5.1 Specific characteristics of the synthetic recreational drug isolate group

Through the group analysis process, the researcher has proposed specific characteristics found in the synthetic recreational drug isolate group, as outlined below.

5.1.1 Mind themes

- Anxiety.
- Difficulty in concentration with increased mental activity.
- A suppression of emotions.
- Fearlessness.
- Feelings of indifference and apathy.
- Loquacity.
- Restlessness.
- Feelings of tranquility, serenity and calmness.
- Ecstasy, euphoria, cheerful, elation, excitement, joy.

5.1.2 Physical themes

- Dryness of the throat.
- Diminished appetite.
- Nausea.

- Cramping pain in the stomach.
- Distension of the stomach.

5.1.3 General themes

- A desire for sweets.
- Sleeplessness.

5.2 <u>Mental and emotional expressions of the synthetic recreational drug isolate</u> group

Positive feelings

Feelings of euphoria, ecstasy, cheerfulness, excitement, bliss, positive, optimistic and laughing are expressed through all five drug remedies. These desired effects are one of the reasons users administer drugs. Other feelings include of peace, tranquillity, calmness, fearlessness, contentment and being carefree. The opposite feelings to this are also present. There are feelings of sadness, dullness, despair and discontentment.

Anxiety

Anxiety is a common sensation in this drug group. The anxiety is noticeable mainly as a mental symptom, but is also evident at a physical level and can be felt in different areas of the body. The main feeling of anxiety is about the future. Together with anxiety, restlessness appears to be a common sensation in the drug group. The restlessness can also be seen at a mental and deeper physical level.

Fear

The common fears encountered in this drug group can be of losing control, going insane, robbers and feeling that something will happen. The opposite feeling of

fearlessness is also common and can also be felt when one is under the influence of a drug.

Indifference

There are feelings of indifference, apathy, detachment, isolation, separation from the world/people etc. on the mental level. These feelings can manifest on a physical level as symptoms of numbness, analgesia, anaesthesia and coldness.

Feelings of isolation and detachment can lead to feelings of clairvoyance, which can be seen in several of the drug remedies.

Delusions and Dreams

Delusions are a major manifestation in the drug remedies. The delusions or hallucinations can be expressed through the various sensory areas. Visual distortions can include seeing triangles, circles and vibrations. Hearing illusions can include sounds being beautiful and visible.

Some of the more common delusions include the following:

- Being criticized;
- Being pursued; and
- Separated.

The common themes in dreams include being amorous, anxious, of being pursued, and death or dead bodies, which are all indicative of drug remedies.

5.3 Polar opposites seen in the synthetic recreational drug isolate group

Analyzing the data revealed prominent polarities within the synthetic recreational drug isolate group remedies, including:

Heat vs. coldness;

• Euphoria, elation, cheerful vs. sadness, despair, discontentment; and

• Hypersensitive vs. lack of sensation.

5.4 Pathological tendencies in remedies from the synthetic recreational drug

isolate group

5.4.1 Complaints of the throat

Lysergic acid diethylamide

INTERNAL THROAT: anxiety, constriction, dryness, lump, pain, spasms, tickling

Heroinum

INTERNAL THROAT: choking, constriction, coldness, dryness, heat, inflammation,

lump, narrow, pain, swallow

Methylphenidatum hydrochloricum

INTERNAL THROAT: inflammation, lump, pain, tingling

Cocainum hydrochloricum

INTERNAL THROAT: dry, burning, tickling, constricted, scratching

MDMA

INTERNAL THROAT: dry, constricted, scratching, raw

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5.4.2 Involvement of the eyes and vision

Lysergic acid diethylamide

EYE: Agglutinated, coldness, discharge, discolouration, dryness, ecchymosis,

heaviness, irritation. Itching, lachrymation, pain, swelling, tingling, twitching.

VISION: acute, bright, changing, clarity, colours, confused, dim, dazzling, distorted,

enlarged, illusions, objects, moving, triangles, vibration.

Heroinum

EYE: heaviness, itching, lachrymation, pain, photophobia, tired, pupils contracted

VISION: colours, fire, foggy, rays, swimming

Methylphenidatum hydrochloricum

EYE: heaviness, lachrymation, pain, photophobia,

VISION: mistakes

Cocainum hydrochloricum

EYE: glaucoma, dilated pupils

MDMA

EYE: Nystagmus, dilated pupils

VISION: increased clarity, colours are bright, intense, and painfully pleasurable

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5.4.3 Complaints of the stomach

Lysergic acid diethylamide

Anxiety, distension, fullness, gagging, nausea, pain, sinking, thirst, vomiting.

Heroinum

Emptiness, eructation's, fullness, heartburn, hernia, nausea, pain, thirst, vomiting.

Methylphenidatum hydrochloricum

Eructation's, hiccough, nausea, pain, retching, thirst, thirstless, vomiting.

Cocainum hydrochloricum

Hiccough, vomiting, pain, haemorrhage.

MDMA

Eructation's, nausea, cramping.

5.4.4 Affection of the nervous system

Lysergic acid diethylamide

Tingling: female genitalia.

Twitching and tingling of the eye.

Numbness: mouth, larynx and trachea, head.

Spasm of the throat.

Formication of the spine.

Trembling: cervical region of the back.

Trembling, tingling and weakness: extremities.

General: analgesia, convulsions, faintness, numbness, synaesthesia, trembling, weakness.

Heroinum

Numbness of the head.

Tingling of vertex, nose, face, extremities.

Twitching and weakness of extremities.

General symptoms of analgesia, anaesthesia, faintness, numbness, weakness and trembling.

Methylphenidatum hydrochloricum

Twitching: face.

Tingling: extremities.

Paralysis: face, generals.

Weakness: generals.

Cocainum hydrochloricum

Paralysis: throat, larynx and trachea, muscles of deglutition.

Formication: skin of hands and forearms.

Numbness: extremities, general.

Paralysis of senses: general.

Paralysis agitans: general.

Chorea, alcoholic tremors, senile trembling.

MDMA

Seizures, tremors in upper and lower limbs, convulsive movement, analgesia.

Extreme sensitivity of the whole nervous system. All senses are enhanced.

5.4.5 Complaints relating to sleep

Lysergic acid diethylamide

Sleepiness, sleeplessness, unrefreshing, waking issues, yawning.

Heroinum

Anxious, disturbed, heavy, light, prolonged, restless, sleepiness, sleeplessness, unrefreshing, waking problems

Methylphenidatum hydrochloricum

Deep, disturbed, refreshing, sleepiness, sleeplessness, unrefreshing, waking problems.

Cocainum hydrochloricum

Restless, sleeplessness.

MDMA

Tired, drowsy, sleeplessness, restless, narcolepsy.

5.4.6 Male genitalia / sex

Lysergic acid diethylamide

Eruptions on penis.

Sexual desire: increased.

Heroinum

Sexual desire: increased, wanting or diminished.

Methylphenidatum hydrochloricum

Sexual desire: diminished.

Cocainum hydrochloricum

MALE GENITALIA/SEX - ABSENT, sensation as if penis were.

MDMA

Impotence with increased sensitivity.

Orgasm impossible.

5.5 Proposed vital sensations and reactions according to Sankaran

Sensation can be expressed in four different ways: as a sensation itself, as a passive reaction, as an active reaction, or as compensation (Sankaran, 2005b:22).

In the synthetic recreational drug isolate group, there was a variety of sensations: anxiety, restlessness, fear, excitement, dryness, indifference and isolation. Sensations

such as anxiety, restlessness and dryness were noticed on mental, physical and general levels.

The passive reaction to these sensations appears to be of heaviness, numbness, dullness, faintness, weakness and coldness.

The active reaction can be described by the sensations of anger, rage, acute, violence, impatience and irritation.

The compensatory reaction is described by the sensations of ecstasy, elation and euphoria. Another feeling of compensation can be of tranquillity.

5.6 Clinical Applications

- 1) Mental disorders: Anxiety, manic depression, delusions, drug abuse, ADHD, paranoid states.
- 2) Chronic fatigue.
- 3) Glaucoma and visual disorders.
- 4) Anorexia Nervosa.
- 5) Headaches.
- 6) Stomach pain (cramping).
- 7) Narcolepsy, sleeplessness and other sleeping disorders.
- 8) Neurological diseases: Chorea, paralysis, senile and alcoholic tremors, formication.

5.7 General drug characteristics

Typical general drug characteristics according to Traub (in Lewis, 2007):

Feelings of isolation, impressions and perceptions are increased, pleasant feelings (euphoria, elation) and fantasies, dreamy/spaced out, delusions hallucinations, numbing of pain, addiction/dependence, disorientated/confusion, beautiful visions, distorted

perception of space and time and self destructive, could be identified in the synthetic recreational drug isolate remedy group.

Evidence of certain characteristics is reflected in the following features listed below (obtained from a variety of materia medicas and proving materials).

5.7.1 Isolation, forsaken, escapism

Lysergic acid diethylamide

MIND - FORSAKEN feeling

MIND - FORSAKEN feeling - isolation, sensation of

MIND - ESCAPE, attempts to

MIND - ESCAPE, attempts to - sit and think, to

DREAMS - ESCAPING

Heroinum

MIND - DELUSIONS - forsaken; is

MIND - FORSAKEN feeling

MIND - FORSAKEN feeling - isolation; sensation of

Methylphenidatum hydrochloricum

"Im very much with myself, it's difficult to share. Aversion to talk." (Prover 4 6c day 10.)

"The remoteness continues." (Prover 4 6c day 4.)

Cocainum hydrochloricum

No data available for this theme in the literature.

MDMA

No data available for this theme in the literature.

5.7.2 Numbness / lack of sensation

Lysergic acid diethylamide

HEAD - NUMBNESS; sensation of - Forehead
HEAD - PAIN - numbness; with
MOUTH - NUMBNESS
LARYNX AND TRACHEA - NUMBNESS- trachea

GENERALS - NUMBNESS - externally

Heroinum

HEAD - NUMBNESS; sensation of - Forehead HEAD - NUMBNESS; sensation of - Vertex GENERALS - NUMBNESS - Affected parts; of GENERALS - NUMBNESS - Externally

Methylphenidatum hydrochloricum

"Blunt sensation regarding my presence in my own body." (Prover 4 6c day 5.)

Cocainum hydrochloricum

EXTREMITIES – NUMBNESS, fingers
GENERALS – NUMBNESS
GENERALS – NUMBNESS, externally
Local sensory paralysis

MDMA

No evidence for this theme in the available literature.

5.7.3 Hypersensitive

Lysergic acid diethylamide

MIND - AWARENESS heightened

MIND - AWARENESS heightened - body; of

MIND - AWARENESS heightened - consciousness expanded

MIND - AWARENESS heightened - details, for

MIND - AWARENESS heightened - individuality in all things, of

MIND - SENSITIVE

MIND - SENSITIVE - colors, to

MIND - SENSITIVE - external impressions, to all

MIND - SENSITIVE - light, to

MIND - SENSITIVE - music, to

MIND - SENSITIVE - nature and natural objects, to

MIND - SENSITIVE - noise, to

Heroinum

MIND - SENSES - acute

MIND - SENSITIVE

MIND - SENSITIVE - criticism; to

MIND - SENSITIVE - nature and natural objects, to

MIND - SENSITIVE - noise, to

MIND - SENSITIVE - opinion of others; to the

MIND - SENSITIVE - sensual impressions, to

MIND - SENSITIVE - want of sensitiveness

SKIN - SENSITIVENESS

SKIN - SENSITIVENESS - touch; to

Cocainum hydrochloricum

Hearing is greatly increased.

Roaring and noises in the head.

Methylphenidatum hydrochloricum

No data available for this theme in the literature.

MDMA

MIND - SENSES- acute

VISION - ACUTE

HEARING - ACUTE

MOUTH - TASTE, acute

MIND - SENSITIVE - touch, to

MIND - SENSITIVE, noise, to

5.7.4 Spaced out/Dreamy/ Out of this world

Lysergic acid diethylamide

MIND - DELUSIONS - space - bodily space, energy and dimension

MIND - DELUSIONS - space - carried into space; he was

MIND - DELUSIONS - space - carried into space; he was - lying; while

MIND - DELUSIONS - space - expansion of

MIND - DELUSIONS - space - home, feels space is his - does not belong on earth

MIND - DELUSIONS - space - spread through space, he was

MIND - DELUSIONS - space - tiny point in the vastness of space, he is a

MIND - DELUSIONS - world - new world; he is moving in a

MIND - DELUSIONS - world - several worlds simultaneously, he is in

Heroinum

MIND - DREAM; as if in a

MIND - DELUSIONS - unreal - everything seems unreal

MIND - DELUSIONS - world - otherworld is close to her

MIND - DELUSIONS - world - parallel world; she is in a

Methylphenidatum hydrochloricum

MIND - DELUSIONS - separated - world; from the - he is separated

MIND - DELUSIONS - separated - world; from the - he is separated - bubble with; a

MIND - DELUSIONS - spaceless

Cocainum hydrochloricum

No data available for this theme in the literature.

MDMA

No data available for this theme in the literature.

5.7.5 <u>Hallucinations/ Delusions: visual, auditory, tactile</u>

Lysergic acid diethylamide

MIND - DELUSIONS - tactile

MIND - DELUSIONS - taste, of - colour, can taste

MIND - DELUSIONS - visions, has - beautiful

MIND - DELUSIONS - visions, has - colorful

MIND - DELUSIONS - visions, has - delight; visions of

MIND - DELUSIONS - visions, has - fantastic

MIND - DELUSIONS - visions, has - horrible

MIND - DELUSIONS - visions, has - monsters, of

MIND - DELUSIONS - visions, has - real; visions are

MIND - DELUSIONS - visions, has - wonderful

MIND - DELUSIONS - visual

MIND - DELUSIONS - hearing - illusions of

MIND - DELUSIONS - hearing - illusions of - beautiful

MIND - DELUSIONS - sight and hearing, of

Heroinum

MIND - DELUSIONS

VISION - COLORS before the eyes - blue - halo of fire

VISION - FIRE - blue

VISION - FOGGY

VISION - FOGGY - closing eyes amel.

VISION - RAYS

VISION - SWIMMING of - objects

Methylphenidatum hydrochloricum

MIND - DELUSIONS - music - hearing music

MIND - DELUSIONS - head - inflated; head were

Cocainum hydrochloricum

MIND- DELUSIONS; hearing; illusions of

MIND - DELUSIONS - visions, has

MDMA

VISION: intense and painfully pleasurable

5.7.6 Ecstasy, euphoria, cheerful, elation, excitement, joy

Lysergic acid diethylamide

MIND - CHEERFUL

MIND - ECSTASY

MIND - ECSTASY - alternating with - anxiety

MIND - ECSTASY - sublime - nature, in

MIND - ECSTASY - sublime - nature, in - birds, in the flight

MIND - EUPHORIA

MIND - EXCITEMENT

MIND - EXCITEMENT - alternating with - sadness

MIND - EXCITEMENT - alternating with - tranquility

MIND - EXCITEMENT - company, in

MIND - EXHILARATION - air, in open

MIND - EXHILARATION - blissful

MIND - BLISSFUL feeling

Heroinum

MIND - CONTENT

MIND - CONTENT - forgets all his ailments and pains

MIND - CONTENT - himself, with

MIND - EUPHORIA

MIND - EUPHORIA - alternating with - sadness

MIND - EXCITEMENT

MIND - EXCITEMENT - desire for

Methylphenidatum hydrochloricum

MIND - CHEERFUL

MIND - JESTING

MIND - LAUGHING - sleep - during

MIND - OPTIMISTIC

Cocainum hydrochloricum

MIND - EXCITEMENT

MIND - EXHILARATION

MDMA

Feelings of bliss, ecstasy and euphoria.

5.7.7 Confusion/ Disorientation

Lysergic acid diethylamide

MIND - CONFUSION of mind

MIND - CONFUSION of mind - daily affairs; about

MIND - CONFUSION of mind - identity, as to his

MIND - CONFUSION of mind - identity, as to his - boundaries, and personal

MIND - CONFUSION of mind - identity, as to his - depersonalization

MIND - CONFUSION of mind - knows not where he is

MIND - CONFUSION of mind - riding, while

MIND - CONFUSION of mind - situations, of

MIND - CONFUSION of mind - time; as to

MIND - CONFUSION of mind - waking, on

Heroinum

MIND - CONFUSION of mind

MIND - CONFUSION of mind - time; as to

Methylphenidatum hydrochloricum

MIND - CONFUSION of mind

Cocainum hydrochloricum

No data available for this theme in the literature.

MDMA

No data available for this theme in the literature.

5.8. General plant drug themes

Sankaran (2002:516) proposed certain plant 'drug' themes. Certain themes from the plant 'drug' group correspond to themes of the synthetic recreational isolate drug group, as outlined below.

However, the theme of benevolence - with the need to do something in order to feel a sense of belonging, is not reflected in the synthetic recreational drug isolate group.

Therefore, this theme can help differentiate between the plant 'drug' group and the synthetic recreational drug isolate group.

5.8.1 Alienation and isolation

The feelings of alienation and isolation in the plant 'drug' group has been identified in the synthetic recreational drug isolate group as feelings of isolation, being forsaken and a desire to escape from reality (See 5.1.1).

Lysergic acid diethylamide

MIND - FORSAKEN feeling - isolation, sensation of

Heroinum

MIND - FORSAKEN feeling - isolation; sensation of

5.8.2 Upliftment

The sensation of upliftment in the plant 'drug' group has been expressed in the synthetic recreational drug isolate group as feelings of joy, euphoria, excitement, contentment etc (See 5.1.6).

Lysergic acid diethylamide

MIND - EUPHORIA

Heroinum

MIND - CONTENT

5.8.3 Hypersensitivity or lack of sensitivity

The lack of sensitivity or hypersensitivity in the plant 'drug' group has been discussed in 5.1.2 and 5.1.3 as themes of the synthetic recreational drug isolate group.

5.8.3.1 **Hypersensitivity**

Lysergic acid diethylamide

MIND - SENSITIVE

MIND - SENSITIVE - external impressions, to all

Heroinum

MIND - SENSES - acute

MIND - SENSITIVE

MDMA

MIND - SENSES- acute

5.8.3.2 Lack of sensitivity

Lysergic acid diethylamide

GENERALS - NUMBNESS - externally

Heroinum

GENERALS - NUMBNESS - Affected parts; of

GENERALS - NUMBNESS - Externally

Cocainum hydrochloricum

GENERALS – NUMBNESS, externally

5.8.4 Increased mental activity

Another common theme from the plant 'drug' group is an increased mental activity in the synthetic recreational drug isolate group:

Lysergic acid diethylamide

MIND - ACTIVITY; desires

Heroinum

MIND - ACTIVITY; desires

MIND - ACTIVITY; desires - creative activity

MIND - ACTIVITY; desires - restless

Methylphenidatum hydrochloricum

MIND - ACTIVITY - accompanied by - weakness general

MDMA

Produces intense activity- physically, mentally, psychically.

5.9 <u>Drug themes can be related to their constituents</u>

The three main constituents of the synthetic recreational drug molecules are Hydrogen, Carbon and Nitrogen. The chemical formulas for each of the synthetic recreational drugs are:

- 1) Lysergic acid diethylamide: C₂₀H₂₅N₃O (Passie et al., 2008:296).
- 2) Heroin: C₂₁H₂₃NO₅ (Snowdown, 2002).
- 3) Methylphenidatum hydrochloride: C₁₄H₁₉NO₂ HCL (Drug.com, 2012).
- 4) Cocainum hydrochloride: C₁₇H₂₁NO₄ (European Monitoring Centre for Drugs and Drug Addiction, 2011a).
- 5) MDMA: C₁₁H₁₅NO₂ (Palfai and Jankiewicz, 1997:321).

Some themes from the synthetic recreational drug isolate remedies can be attributed to the elements from which they are constituted. Certain themes in Nitrogen and Hydrogen will be discussed as they also appear in the synthetic drug isolate remedies.

5.9.1 Comparison with remedies from the mineral kingdom

5.9.1.1 <u>Nitrogen</u>

According to Scholten, one of the themes in Nitrogen is the desire for enjoyment. As long as they can enjoy life, everything is good. If they lose the possibility to feel happy, they can become discontented and irritable (Scholten, 1993:151). Recreational drugs are often administered for their euphoric effects and their ability to make one happy and content. The Nitrogen themes of enjoyment and happiness (Scholten, 1993:151) can also be seen in the synthetic recreational drug isolate remedies. Some examples from the synthetic recreational drug isolate remedies are listed below:

Lysergic acid diethylamide

MIND - CHEERFUL

MIND - ECSTASY

MIND - EUPHORIA

MIND - EXCITEMENT

MIND - EXCITEMENT - company, in

MIND - EXHILARATION - blissful

MIND - BLISSFUL feeling

Heroinum

MIND - CONTENT

MIND - CONTENT - forgets all his ailments and pains

MIND - CONTENT - himself, with

MIND - EUPHORIA

MIND - EUPHORIA - alternating with - sadness

MIND - EXCITEMENT

MIND - EXCITEMENT - desire for

Methylphenidatum hydrochloricum

MIND - CHEERFUL

MIND - LAUGHING - sleep - during

Cocainum hydrochloricum

MIND - EXCITEMENT

MIND - EXHILARATION

MDMA

Feelings of bliss, ecstasy, euphoria.

Another theme in Nitrogen is to feel relaxed and satisfied. If they are not relaxed, they will vent their feelings of tension (Scholten, 1996:172). They need to let go from time to time or else the tension will build up too much. Similarly, people also use drugs from time to time to relieve or vent their tensions and problems.

According to Scholten, the essence of Nitrogen is assertiveness and the need to show others who they are. They like other people to notice and admire the success that they have achieved (Scholten, 1996:172). Sankaran identifies that the main feelings of Nitrogen is to be free and released, without being bound down (Sankaran, 2009:199).

5.9.1.2 Hydrogen

The other element that significantly contributes to the themes of the synthetic recreational isolate drug group, is Hydrogen. Several themes of Hydrogen will be discussed with examples of the themes found in the synthetic recreational isolate drug group.

1) Scholten suggests that the main theme in Hydrogen is a sensation or desire to be one. They want to experience the world as one total unity and merge with others (Scholten, 1996:76). However, this is not a common theme in the synthetic recreational isolate drug group, and is found only in *Lysergic acid diethylamide*.

Lysergic acid diethylamide

Merging

Delight in merging with another (God, human, animal, plant or stone)

Merging of Senses, merging with Music

MIND - DELUSIONS - connected, is - oneness with his fellow humans and the whole of the universe, a feeling of

In Hydrogen, if the individual is unable to experience unity, they feel separated and estranged from their family and the world. They can feel lost and alone (Scholten, 1996:76-77). However, the feelings of isolation in the synthetic recreational isolate drug group do not stem from not experiencing unity. In the synthetic recreational isolate drug group, there can be a desire to be alone or they feel isolated because of the sensation of indifference or apathy, or they want to live in 'their' own world and escape from reality. Sankaran also suggests the feelings of isolation and separation with themselves or with others occur in a hydrogen patient (Sankaran, 2009:133). These themes have been identified earlier as themes of the synthetic recreational isolate drug remedy group.

Lysergic acid diethylamide

MIND - ESTRANGED

Heroinum

MIND - FORSAKEN feeling - isolation; sensation of

MIND - DELUSIONS - lost; she is

Methylphenidatum hydrochloricum

MIND - FORSAKEN feeling - isolation, sensation of

MIND - DELUSIONS - lost, self is

2) Another theme in Hydrogen is of absolute truth. They search for the truth and want to know why things are the way they are (Scholten, 1996:76). The search for the truth is not a common, prominent theme in the synthetic recreational isolate drug group.

Lysergic acid diethylamide

MIND - TRUTH; desire for

MIND - TRUTH; telling the plain

Heroinum

MIND - TRUTH - telling the plain truth

3) There are also feelings of being spaceless and timeless in Hydrogen. They find it

difficult to judge distance and time does not exist for them. Their whole experience is

simple and exists now, in the present. Hence there are feelings of timelessness and

spacelessness (Scholten, 1996:77). The feelings of being spaceless and timeless in the

synthetic recreational isolate drug group can be due to the distortion, confusion and

'spaced out' effects of the drugs.

Lysergic acid diethylamide

MIND - DELUSIONS - time - earlier; time seems

MIND - DELUSIONS - time - endless, the day is

MIND - DELUSIONS - time - exaggeration of time

Heroinum

MIND - TIME - slowly, appears longer; passes too

Methylphenidatum hydrochloricum

MIND - DELUSIONS - spaceless

4) With the inability to orientate themselves, it can lead to feelings of confusion and they

don't know where they are anymore (Scholten, 1996:77).

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Lysergic acid diethylamide

MIND - CONFUSION of mind

MIND - CONFUSION of mind - knows not where he is

Heroinum

MIND - CONFUSION of mind

MIND - CONFUSION of mind - time; as to

Methylphenidatum hydrochloricum

MIND - CONFUSION of mind

The delusions, moods and senses in Hydrogen are similar to the delusions, moods and senses found in the drug remedies. The delusions include: being separated from the world, unreal, being pursued and criticized. Similar moods include: laughing, cheerful, optimistic, feeling peaceful and content. However, the synthetic recreational isolate drug group has more feelings of ecstasy, euphoria, excitement and exhilaration compared to Hydrogen. The senses in Hydrogen and synthetic recreational isolate drug group are also expressed as being sensitive. However, the senses in the synthetic recreational isolate drug group are more acute and distorted, producing many hallucinations.

Two general symptoms listed in Hydrogen also correspond to the general symptoms from the synthetic recreational drug remedies. The two general symptoms include:

Desire: Sweets

Sleep: Sleeplessness (Scholten, 1996:78):

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5.10 Comparison of other plant drug remedies with the synthetic recreational drug isolate group

5.10.1 Remedies from the plant kingdom

Cannabis indica, Anhalonium lewinii, Opium and Coca are classified as being organic plant 'drug' remedies. Each of the above plant 'drug' remedies have certain common drug themes as well as different themes compared to the synthetic recreational drug isolate group.

- 1) Cannabis indica has sensations like other drug remedies of being absentminded, dreamy, with exaggerated senses of sound and colour (Scholten, 1996:78). The feeling of joy is a common sensation in many drug remedies, and is also expressed in Cannabis indica. However, the feeling of joy in Cannabis indica is expressed as floating freely (Sankaran, 2002:726) as Cannabis indica has the main feelings of expanding and feeling free. The opposite sensation of being heavy, dragged down and oppressed (Sankaran, 2002:290) is also seen, which is not found in synthetic recreational drug isolate group.
- 2) In Anhalonium lewenii, common drug themes that can be seen are: strong out of body experiences, cosmic experiences with shapes and colours and confusion of senses (Scholten, 1996:78). There is also a feeling of merging with one's surroundings or feeling of being one, similar to Hydrogen and LSD (Sankaran, 1997:9). However, in Anhalonium lewinii, there is a main feeling of expansion and shrinking which is not expressed in the synthetic recreational drug isolate group (Sankaran, 2002:290). The feelings in Anhalonium lewinii is of expansion of the whole being, and therefore, the feelings of joy are also expressed as being expanding and boundless (Sankaran, 2005c:726).
- 3) In *Opium*, the main sensation is of intense pain and suffering, which is not a main sensation in the synthetic recreational drug isolate group. The compensatory reaction of by being peaceful, serene and tranquil is however shared with the synthetic recreational drug isolate group (Sankaran, 2002:290). The feelings of

joy in *Opium* can be expressed as being calm or steady, where they can experience peace and avoid the pain and suffering (Sankaran, 2005c:726). Heroinum and Opium share some common themes such as painlessness, anxiety and increased sensitivity. However, Heroinum has themes of confusion, shame, isolation and wanting to be carefree (Snowdown, 2002).

4) Coca has beautiful visions, spaced our feelings and feelings of isolation which can be seen in the synthetic recreational drug isolate group. However, it is the only drug remedy that has a keynote symptom of "Desire for Grandeur" and delusions of being a great person (Sankaran, 1997:66).

5.10.2 Comparison with the Rubiaceae family

Some themes from the synthetic recreational drug isolate group correspond with themes from the Rubiaceae family. These include themes such as sleeplessness, desiring activity, the passive reaction of dullness and a compensatory feeling of tranquillity (Sankaran, 2002:474-475). However, the main sensation in the Rubiaceae family is stimulation and they desire stimulation which is not expressed as a central sensation in the synthetic recreational drug isolate group. Individuals requiring a remedy from the Rubiaceae family will continuously generate ideas in the mind and the person's mind will be stimulated with more and more ideas. These themes are not found in the synthetic recreational drug isolate group (Sankaran, 2002:964).

5.10.3 Comparison with the Piperaceae family

Common themes from the Piperaceae family that overlap with themes from the synthetic recreational drug isolate group include: feeling cheerful and excited, with a passive reaction of dullness (Sankaran, 2005a:20). However, the main feeling in the Piperaceae family is the desire for amusement because life is boring, dull and painful and they want to be pleasurably amused, which is not the main sensation expressed in the synthetic recreational drug isolate group (Sankaran, 2005c:965). The Piperaceae family is also the only family with a sensitivity to pain and boredom, while the

Papaveraceae family has a sensitivity to only pain, not boredom (Sankaran, 2007b:1706).

5.10.4 Comparison with the Papaveraceae family

The synthetic recreational drug isolate group has many features similar to the Papaveraceae family: an active reaction of rage and violence; a passive reaction of fainting, analgesia and numbness, the compensatory feeling of tranquillity and calmness and the symptom of numbness (Sankaran, 2005a:20). In the Papaveraceae family, they desire no pain and want feelings of pleasure to cut off the sensations of pain and suffering in their life. They just need to anesthetize themselves from the outside (Sankaran, 2005c:965). Recreational drugs are sometimes administered to anaesthetize the pain and suffering in one's life. However, the synthetic recreational drug isolate group does not have a main theme of this intense suffering, pain and agony with experiences of death and dying as in the Papaveraceae family (Sankaran, 2005c:698). The Papaveraceae family also has no desire for stimulation as in the Rubiaceae family or to divert themselves from boredom as in the Piperaceae family.

5.11 Comparison with the animal kingdom: Class Aves

Some themes from the synthetic recreational drug isolate group overlap with themes from Class Aves. Some of the common themes shared are: euphoria, elation, joy, detachment and the numerous delusions. The delusions in Class Aves involves the perception of themselves being separated, as well as being pursued, which is also a common delusion in the synthetic recreational drug isolate group. However, the Class Aves has a common delusion off body parts being enlarged or separated, which is not established in the synthetic recreational drug isolate group. The theme of detachment in the synthetic recreational drug isolate group is expressed mainly on the mental sphere, but it is not a main theme which is present on every level like in the bird remedies. The joy and elation in bird remedies is also expressed more from a sensation of lightness and freedom, which is not the issue in synthetic recreational drug isolate group (Harkhu,

2011:91-92). Other common themes shared, as proposed by Shore (2004) and Fraser (2009) in Class Aves are: issues of disorientation, appetite, spiritual awareness, clairvoyance and restlessness.

Class Aves can be differentiated from the synthetic recreational drug isolate group by the Class Aves animal characteristics such as the desire for and/or sensation of biting, feelings of freedom, emptiness, vacancy, floating, lightness, restriction/cramping/constriction, and swelling and enlargement of parts (Harkhu, 2011:70-71).

5.12 AIDS Miasm and the synthetic recreational drug isolate group

In chapter 4, it was seen that specific synthetic recreational drug isolate remedies (MDMA and LSD) produced certain AIDS miasmatic features. Similarly, the synthetic recreational drug isolate group as an entirety also share a few similarities with the AIDS miasm.

Certain sensations and reactions from the synthetic recreational drug isolate group overlap with themes from the AIDS miasm.

The main sensations derived from the synthetic recreational drug isolate group were: anxiety, restlessness, fear, excitement, dryness, indifference and isolation.

The theme of vulnerability in the AIDS miasm incorporates sensations such as fear, anxiety, anger, rage, and violence, where rage and violence were active reactions of the synthetic recreational drug isolate group.

The passive reaction of numbness and the sensation of indifference in the synthetic recreational drug isolate group corresponded to the themes of indifference and a lack of feelings/emotions in the AIDS miasm.

The feeling of isolation is also linked to the main theme of disconnection and isolation in the AIDS miasm. The AIDS miasm also has the theme of dispersion, which explores the subject of thirst, water and dryness. Dryness was a prominent sensation of the synthetic recreational drug isolate group, as this sensation was seen on the mental, physical and general levels.

<u>Table 9</u>: Common themes between the AIDS miasm and synthetic recreational drug isolate remedy group

AIDS miasm themes	Synthetic recreational drug isolate remedy group
Fear, anxiety, rage, anger, violence	Fear, anxiety, rage, anger and violence were active reactions of the synthetic recreational drug isolate group.
Indifference/Lack of feelings emotion	Numbness and the sensation of indifference in the synthetic recreational drug isolate group were the passive reactions.
Isolation/disconnection/separation	One of the common delusion of the synthetic recreational drug isolate group was separation
Dispersion-water, thirst, dryness	Dryness was a prominent sensation of the synthetic recreational drug isolate group, as this sensation was seen on the mental, physical and general levels.

5.13 AIDS miasm and related remedies

According to the Fraser, the AIDS miasmatic picture corresponds to remedies from Class insecta, Class Aves, Lacs of mammals, drug remedies, certain remedies from the mineral and vegetable kingdom, sea remedies and the AIDS nosode (Fraser, 2002:54-59). Remedies from the drug family include traditional drug remedies such as *Coffea cruda*, *Opium, Agaricus muscarius, Cannabis indica, Anhalonium lewenii*, to recent remedies such as *MDMA*, *LSD* 25 and *Heroinum* (Fraser, 2002:122). Fraser proposes

that the different remedies share similar themes of the AIDS miasm. However, the remedies can differentiated according to the characteristics of the kingdom or group they belong to, particular themes, issues and the individual remedy characteristics (Fraser, 2002:48).

5.13.1 Drug and bird remedies

Drug abuse has become a major issue as it closely meets the overpowering needs of many individuals (Fraser, 2002:55). The themes of isolation, secrecy, feeling of numbness and disconnection from the pain of modern existence often relate to the issues of a person in an AIDS miasmatic and disease state. AIDS has also been associated with drug abuse, especially with intravenous use of drugs, as it is one mode of transmitting the virus (Fraser, 2002:124).

According to Fraser (2002:54), remedies from Class Aves have a strong connection to the AIDS miasm as birds are able to live freely without any restrictions or boundaries, and they are able to move, free of the constraints of the earth (Fraser, 2009:95).

CHAPTER 6

CONCLUSION AND RECOMMENDATIONS

Due to the paucity of comprehensive materia medica, repertory, provings and clinical information of the synthetic recreational drug isolate group, the researcher aimed to extract and evaluate common themes and symptomatology that manifested in the homoeopathic remedies belonging to the synthetic recreational drug isolate group.

Conducting this study extracted and clarified the common sensations and characteristics of the group. The extracted and analyzed data was also able to demonstrate a clear picture of the similarities in the synthetic recreational drug isolate group as a whole.

This was accomplished by applying Sankaran's methodology and analysis to the synthetic recreational drug isolate group. Therefore, this research has shown that Sankaran's methodology of group analysis can be applied to related remedies, as they share common characteristics that define them as a group.

6.1 Group analysis approach to homoeopathy

In current times where scientific processes dominate, it is crucial to develop a more systematic methodology and approach to homoeopathy. Theories also need to be explored to the highest level before being recognized or disapproved. Then only can a profession progress closer to mainstream science.

The outcome of this study has confirmed the applicability of Sankaran's group analysis methodology to the synthetic recreational drug isolate group. Therefore, group analysis has proved to be an example of a systematic process.

It is imperative that when applying the group analysis methodology to a specific group, it must be correctly and carefully applied to avoid producing misleading and false interpretation of information.

6.1.1 Challenges of this study

Applying group analysis to the synthetic recreational drug isolate group was challenging. The remedies belonging to the synthetic recreational drug isolate group are recently proved and are inadequately portrayed in the materia medica, repertory and computer software such as Radar 10 and Encyclopaedia Homoeopathica. Instead, manual keyword searches and provings had to be employed. However, original provings for most of the remedies were obtained and therefore the information was accurate. Based on the paucity of information, the remedies as a group generally provided relatively fewer physical, mental and emotional symptoms. This made it challenging to outline certain central or main themes of the group. Instead, a variety of physical and mental/emotional symptoms were listed. The results from this group analysis would have been improved and enhanced if more literature was readily available.

However, as synthetic recreational drugs are a major issue, it is important to keep up with the relevant problems of the time in order to treat them at the time. Therefore, it was important to conduct this research due to the increase usage of synthetic recreational drugs. This study can be a foundation to which further research and information can be added.

6.2 Recommendations for further research

- 1) In order to confirm the ideas outlined in this dissertation and to provide a deeper understanding of the group, more high quality, in depth provings of synthetic recreational drug isolates should be conducted in the future. The provings should be double blinded, placebo controlled 30CH Hahnemanian provings.
- 2) As information on the synthetic recreational drug isolate group is minimal, proving data should be incorporated into software programmes and other data sources. This will allow easier access to information on the synthetic recreational drug isolate group.
- 3) The results from this research should be compared with other 'drug' group families such as plant derived 'drug' remedies e.g. *Coffea cruda, Cannabis indica* or other synthetic recreational drugs.
- 4) Group analysis should be applied to specific sub groups within the recreational drugs i.e. opioids, hallucinogens, stimulants etc in order to reveal more refined, valuable information.
- 5) Further research into the AIDS miasm needs to be promoted. The AIDS miasm can be discussed in terms of placing it within the miasmatic model.
- 6) Further research into the group of remedies related to the AIDS miasm should be conducted as it can reveal possible remedies that can be used to treat AIDS.

6.3 Final thoughts

The process of this study has been enjoyable as much has been learned about the recreational synthetic drug isolate group. The researcher feels it is appropriate to end off with the following poem, which incorporates some of the themes of recreational drugs:

Fairy Land

"A vacation spot to explore any fantasy where unicorns, gnomes and elves roam free travel guides say there's so much to do guests check in for a quick get-away most end up leaving with mind decay a good travel tip for those who arrive leave right now and maybe you'll survive."

(Michael, 2012).

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APPENDIX A: Keywords utilized according to Sankaran's (2005:7) miasmatic model

Acute	Typhoid	Malaria	Ringworm	Sycotic	Cancer	Tubercular	Leprosy	Syphilis
Acute	Sub-acute	Paroxysmal	Trying	Fixed	Control	Hectic	Isolation	Destruction
Sudden	Crisis	Periodicity	Giving Up	Fixed	Self control	Trapped	Mutilation	Homicide
Violent	Intense	Stuck	Irritation	weakness	Perfection	Closed in	Disgust	Suicide
Panic	Sinking	Persecution	Discomfort	Guilt	Fastidious	Suffocation	Dirty	Total
Danger	Recover	Unfortunate	Accepting	Hide	Chaos	Intense	Intense	Impossible
Reflex	Intense	Alternation	alternating	Secretive	Order	activity	oppression	Despair
action	short effort	between	with trying	Avoidance	Superhuma	Change	Despair	Devastation
Escape	Emergency	excitement		Accepting	n	Freedom	Bites	Psychosis
Helpless	Impatience	and	Accepting	Giving-up	Beyond	Defiant	himself	Ulcers
Terror	Collapse	acceptance	alternating	Warts	ones	Oppression	Outcast	
Fright	Demanding		with effort	Tumors	capacity	Desire to	Loathing	
Instinctive	Critical	Hindered		Gonorrhea	Great	change	Sadism	
reaction	Typhoid	Obstructed	Herpetic		expectation		Intense	
Insanity		Unfortunate	Acne			Tuberculosi	hopelessne	
		Harassed	Ringworm			s	SS	
		Intermittent					Hunted	

APPENDIX B: Synonyms using a Thesaurus (2006)

Anxiety	Indifference	Heaviness	Dryness	Heat	Acute	Weakness
Anxiety nervousness worry concern unease apprehension fear care restlessness tension distress angst suspicion disquiet	apathy unconcern coldness disregard detachment lack of interest unresponsiveness carelessness negligence	weight gravity sluggishness numbness dullness sadness depression torpor solidity seriousness	Dryness dehydrated, arid, barren, desiccated, dried up, parched, thirsty	passion, excitement, intensity, violence, fever, fury, warmth, zeal, agitation heat up hotness, temperature, swelter, sultriness, acuteness	sharp sensitive heightened severe intense violent piercing stabbing shooting cutting, severe, sudden serious powerful	frailty, fatigue, exhaustion, fragility, debility, feebleness, faintness powerlessness, vulnerability, impotence, irresolution flaw difficulty fondness taste appetite helplessness
						passion

APPENDIX C: Definitions of extracted sensations according to Collins (2006)

Anxiety	Indifference	Heaviness	Dryness	Heat	Acute	Weakness
1. a state of	1. the fact or	1.of	1. lacking	1. the	1.sensitive to	1. the state or
uneasiness	state of being	comparatively	moisture; not	sensation	details; keen	quality of being
or tension	indifferent;	great weight,	damp or wet	caused in the		weak
caused by	lack of care or	weighted		body by heat	2.of extreme	
apprehension	concern			energy;	importance;	
of possible		2.having a		warmth	crucial	
future	2. lack of	relatively high				
misfortune,	quality;	density		2. the state or	3. sharp or	
danger, etc;	mediocrity,			quality of being	severe;	
worry	importance;			hot	intense	
	insignificance					

Euphoria	Itching	Restlessness	Fear	Anger	Tranquillity	Sensitive	Separated
1. a feeling of great elation, especially when exaggerated	1.an irritation or tickling sensation of the skin causing a desire to scratch 2. a restless desire	1. unable to stay still or quiet 2.ceaselessly active or moving 3. worried; anxious; uneasy	1. a feeling of distress, apprehension, or alarm caused by impending danger, pain, etc	1. a feeling of great annoyance or antagonism as the result of some real or supposed grievance; rage; wrath	1. A state of calm or quietude	1.easily irritated 2. affected by external conditions or stimuli 3. responsive to or aware of feelings, moods, reactions	1. Divide up into parts, sever or be severed

APPENDIX D

Complete Repertory Rubrics containing two or more synthetic recreational drug isolate remedies

	Heroi	<u>L</u> <u>S</u>	<u>M</u> P	Cocai	MD
	num	<u>D</u>	<u>H</u>	num	<u>MA</u>
MIND - ABSORBED	Х	Х			
MIND - ACTIVITY; desires	Х	Х			Х
MIND - AGILITY, mental	Х			Х	
MIND - AMATIVENESS	Х	Х			
MIND - ANGER - violent	X	Х			
MIND - ANOREXIA NERVOSA		Х			Х
MIND - ANSWERING - aversion to answer	Х		Х		
MIND - ANXIETY - causeless		Х			Х
MIND - ANXIETY - conscience; anxiety of	Х	Х			
MIND - ANXIETY - family; about his	Х		Х		
MIND - ANXIETY - future, about	Х	Х	Х		
MIND - ANXIETY - waking, on	Х	Х			
MIND - AUDACITY	Х	Х		Х	
MIND - BLISSFUL feeling		Х			Х
MIND - CARESSED; being - wants to be caressed	Х	Х			Х
MIND - CENSORIOUS - oneself; of	Х	Х			
MIND - CLAIRVOYANCE	Х	Х			
MIND - CLARITY of mind	Х		Х		Х
MIND - COMPANY - aversion to	Х	Х	Х		
MIND - COMPANY - aversion to - desire for					
solitude	X	Х			
MIND - COMPANY - aversion to - loathing of					
company	X	X			

MIND - CONCENTRATION - difficult - studying		Х	X		
MIND - CONFIDENT	Х	Х			
MIND - CONFUSION of mind - time; as to	Х	X			
MIND - CONTENT - himself, with	Х	Х			
MIND - COURAGEOUS	Х	X			
MIND - DANCING		Х			X
MIND - DEEDS - great; sensation as if he could do		Х		Х	
MIND - DELUSIONS - alone, being - world; alone					
in the	X	X			
MIND - DELUSIONS - betrayed; that she is	Х	Х			
MIND - DELUSIONS - body - ugly; body looks	Х	Х			
MIND - DELUSIONS - criticized, she is	Х	Х		Х	
MIND - DELUSIONS - faces, sees	Х	Х			
MIND - DELUSIONS - forsaken; is	Х	Х			
MIND - DELUSIONS - friend - surrounded by					
friends; being	X	X			
MIND - DELUSIONS - great person, is a	Х	Х			
MIND - DELUSIONS - hearing - illusions of	Х			Х	
MIND - DELUSIONS - heavy; is	Х	Х			
MIND - DELUSIONS - images, phantoms; sees -					
frightful		X		X	
MIND - DELUSIONS - insane - he is insane	Х	Х			
MIND - DELUSIONS - laughed at and mocked at;					
being	X	X			
MIND - DELUSIONS - lost; she is	Х	Х			
MIND - DELUSIONS - neglected - duty; he has					
neglected his	X	X			
MIND - DELUSIONS - noise - hearing noise		Х		Х	
MIND - DELUSIONS - poisoned - he - has been	Х	Х			
MIND - DELUSIONS - pursued; he was		Х		Х	Х

MIND - DELUSIONS - separated - body - mind are separated; body and MIND - DELUSIONS - separated - he were separated from himself X MIND - DELUSIONS - separated - world, from the - he is separated MIND - DELUSIONS - spaceless MIND - DELUSIONS - strange - everything is X MIND - DELUSIONS - strange - familiar things seem strange X MIND - DELUSIONS - strange - land; as if in a	X X X	X	X	
separated; body and MIND - DELUSIONS - separated - he were separated from himself X MIND - DELUSIONS - separated - world, from the - he is separated X MIND - DELUSIONS - spaceless MIND - DELUSIONS - strange - everything is X MIND - DELUSIONS - strange - familiar things seem strange X MIND - DELUSIONS - strange - land; as if in a	X	Х		
MIND - DELUSIONS - separated - he were separated from himself X MIND - DELUSIONS - separated - world, from the - he is separated X MIND - DELUSIONS - spaceless MIND - DELUSIONS - strange - everything is X MIND - DELUSIONS - strange - familiar things seem strange X MIND - DELUSIONS - strange - land; as if in a	X	X		
separated from himself X MIND - DELUSIONS - separated - world, from the - he is separated X MIND - DELUSIONS - spaceless MIND - DELUSIONS - strange - everything is X MIND - DELUSIONS - strange - familiar things seem strange X MIND - DELUSIONS - strange - land; as if in a				1
MIND - DELUSIONS - separated - world, from the - he is separated X MIND - DELUSIONS - spaceless MIND - DELUSIONS - strange - everything is X MIND - DELUSIONS - strange - familiar things seem strange X MIND - DELUSIONS - strange - land; as if in a			1	
he is separated X MIND - DELUSIONS - spaceless MIND - DELUSIONS - strange - everything is X MIND - DELUSIONS - strange - familiar things seem strange X MIND - DELUSIONS - strange - land; as if in a	V	ĺ		
MIND - DELUSIONS - spaceless MIND - DELUSIONS - strange - everything is MIND - DELUSIONS - strange - familiar things seem strange X MIND - DELUSIONS - strange - land; as if in a	.,			
MIND - DELUSIONS - strange - everything is X MIND - DELUSIONS - strange - familiar things seem strange X MIND - DELUSIONS - strange - land; as if in a	X	X		
MIND - DELUSIONS - strange - familiar things seem strange X MIND - DELUSIONS - strange - land; as if in a	X	Х		
seem strange X MIND - DELUSIONS - strange - land; as if in a	X			
MIND - DELUSIONS - strange - land; as if in a				
	X			
strange	X			
MIND - DELUSIONS - strangers - surrounded				
by X	Х			
MIND - DELUSIONS - trapped; he is	Χ			
MIND - DELUSIONS - unreal - everything seems				
unreal	Х			
MIND - DELUSIONS - visions, has	X		Х	
MIND - DELUSIONS - worms X			Х	
MIND - DETACHED X	Χ	Χ		
MIND - DRUGS - taken drugs; as if one had X		Х		
MIND - ECSTASY	X			Х
MIND - EMOTIONS - suppressed X	Χ	Χ		Х
MIND - ENNUI, tedium X	Χ			
MIND - EUPHORIA X	Χ			Х
MIND - EXERTION - physical - desire	Χ	Χ	1	1
MIND - FASTIDIOUS X	^			
MIND - FEAR - control; losing X	X	Х	1	

MIND - FEAR - happen, something will	Х	X			
MIND - FEAR - insanity		X			Х
MIND - FEAR - robbers, of		Х	Х		
MIND - FEARLESS	Х	Х		Х	X
MIND - FEARLESS - danger; in spite of	Х	Х			
MIND - FOREBODINGS	Х	Х			
MIND - GIGGLING	Х	Х			
MIND - HEAVINESS; sensation of	Х	X			
MIND - HELPLESSNESS; feeling of		Х	Х		
MIND - INACTIVITY	Х				Х
MIND - INDIFFERENCE, apathy - appearance; to					
his personal		X		X	
MIND - INDIFFERENCE, apathy - business affairs,					
to	X	X			
MIND - INDIFFERENCE, apathy - duties; to	Х	X			
MIND - INDIFFERENCE, apathy - external things;					
to	X	X			
MIND - INDIFFERENCE, apathy - family, to his	Х	Х			
MIND - INDIFFERENCE, apathy - joyless	Х	Х	Х		
MIND - INDIFFERENCE, apathy - pain - to pain	Х	Х			
MIND - INDIFFERENCE, apathy - pleasure, to	Х	Х			
MIND - INITIATIVE, lack of		Х	Х		
MIND - INSECURITY; mental	Х	X			
MIND - INTOLERANCE	Х	X			
MIND - JEALOUSY - irrational		Х		Х	
MIND - LAUGHING - trifles, at	Х	X			
MIND - MATERIALISTIC	Х	X			
MIND - MEDITATING	Х	X	Х		
MIND - MEMORY - weakness of memory - dates,					
for	X	X			

MIND - MEMORY - weakness of memory -					
happened, for what has	X	X			
MIND - MEMORY - weakness of memory - objects;					
for where he has put	X		X		
MIND - MISTAKES; making - names, in	Х	Х	Х		
MIND - MORAL FEELING; want of	Х			Х	
MIND - MUSIC - amel.		Х	Х		
MIND - MUSIC - desire for		X	Х		
MIND - OPTIMISTIC		Х	Х		Х
MIND - PEACEFUL FEELING	Х				Х
MIND - POSITIVENESS	Х	Х			Х
MIND - PRAYING	Х	Х			
MIND - REST - cannot rest when things					
are not in the proper place	X	X			
MIND - RESTLESSNESS - conscience, of	Х	Х			
MIND - SECRETIVE	Х	Х			
MIND - SELFISHNESS, egoism	Х	Х			
MIND - SENSITIVE - nature and natural objects, to	Х	X			
MIND - SPACED-OUT feeling	Х	Х			
MIND - SPEECH - hesitating	Х	Х			
MIND - STRANGE - everything seems	Х	Х			
MIND - THOUGHTS - rapid, quick	Х	Х	Х		
MIND - THOUGHTS - rush, flow of	Х	Х			
MIND - THOUGHTS - sexual	Х	Х			
MIND - TOUCHED - aversion to be	Х	Х			
MIND - TRUTH; telling the plain	Х	Х			
MIND - UNFEELING, hardhearted	Х	Х			
MIND - UNREAL - everything seems	Х	X			
MIND - WRITING - indistinctly, writes	Х	X			

Appendix E: Keywords/themes included in the AIDS miasm (Fraser, 2002:ii-iv)

AIDS

Connection

Disconnection

Indifference-apathy

Oversensitiveness

Dispersion

Instability

Extremes

Confusion

Feminization

Vulnerability

Infection

Boundaries

Obstruction

Communication

Clarity

Nature

Isolation

Drugs

Anaesthesia

Despair

Water

Music

Space

Thirst and Dryness

Chaos and order

Materialism