

The Homeopathic Treatment of Warts

by

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

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ABSTRACT

The aim of this study was to determine if homeopathy has a role to play in the treatment of warts. This study focuses only on external warts (excluding genital warts). A sample of thirty patients was taken from the greater Durban area, and from this sample fifteen were treated with Homeopathic simillimum treatment and the remaining fifteen received placebo treatment. The study was conducted using the double blind protocol with all medications being prepared and dispensed by a neutral homeopathic pharmacist. Every twenty six days for the duration of the six month trial, patients' warts were photographed and questionnaires completed, regarding the patients' perception to the treatment. The study was divided into three sections viz. Subproblem one, two and three.

Subproblem one was the objective analysis of the treatment by means of colour photography. Trace outlines of the warts from the photographs were scanned onto a computer which calculated the surface area of the warts. Each group (i.e. the control and treatment group) was then compared with themselves (i.e. before and after treatment) using the paired T-test. With the control group $p = 0.670$, indicating there was no statistically significant difference. With the treatment group $p = 0.264$, indicating there was no statistically significant difference. When comparing the surface area of the warts treated with homeopathy as opposed to those treated with placebo using the unpaired T-test no significant difference was found between the two groups ($p = 0.947$).

Subproblem two was concerned with the subjective analysis of the treatment by measuring the patients perception to the treatment with a questionnaire. Each group was then compared with themselves (i.e.

before and after treatment) using the paired T-test. With the control group $p = 0.623$, indicating there was no statistically significant difference. With the treatment group $p = 0.1002$, indicating there was no statistically significant difference between the beginning and end of the treatment (although this value was closer to 0.05 than the p value of the control group and thus more significant). When comparing the patients perception to the treatment of those treated with homeopathy as opposed to those treated with placebo using the unpaired T-test $p = 0.947$, indicating there was not a statistically significant difference between the two groups.

Subproblem three was a comparative analysis of subproblem one and two. There was a positive correlation between the wart surface area and the patients perception to the treatment with those patients receiving Homeopathic treatment ($p = 0.0225$, $r = 0.8246$). 60% of the treatment group patients improved, 20% worsened and there was no agreement between subproblem one and two with 20%. There was a poor correlation between the wart surface area and the patients perception to the treatment with those patients receiving Placebo treatment ($p = 0.9957$, $r = 0.0025$). 33.33% of the control group patients improved, 46.67% worsened and there was no agreement between subproblem one and two with 20%. It was thus concluded that although there was not a statistically significant difference between the control and treatment groups, there was a difference measured (as can be seen considering the frequency of occurrences) and therefore homeopathy does have a role to play in the treatment of warts.

Uittreksel

Die doel van die studie was om te bepaal of homopatie 'n rol speel in die behandeling van uitwendige vratte (uitsluitende genitale vratte). 'n Steekproef van 30 pasiënte is uit die groter Durban-gebied geneem van wie 15 die homopadiese simillimum voorgeskryf is en 15 plasebo. Die studie is op die dubbele blinde beginsel toegepas en alle medisyne is deur 'n onpartydige homopadiese apteker voorberei en oorhandig. Die studie het ses maande geduur. Gedurende dié tydperk is die pasiënte se vratte elke 26 dae gefotografeer en het die pasiënte vraelyste ingevul rakende hulle siening van die behandeling.

Die projek is in drie gedeel: Subprobleem een, twee en drie. Subprobleem een het gehandel oor die objektiewe ontleding van die behandeling deur middel van kleur-fotografie. Die buitelyne van die vratte op die foto's is op rekenaar geplaas en daarvolgens is die oppervlak van die vratte bepaal. Elke groep - die eksperimentele en kontrole groep - se vordering (voor en na behandeling) is dan bepaal deur middel van die gepaarde T-toets. Daar was geen beduidende statistiese verskil in die kontrole groep ($p = 0.670$), of in die eksperimentele groep ($p = 0.264$) nie. Wanneer die oppervlakte van die vratte in die eksperimentele groep vergelyk is met dié van die kontrole groep deur middel van die ongepaarde T-toets, was daar ook geen beduidende statistiese verskil tussen die twee groepe nie ($p = 0.947$).

Subprobleem twee het gehandel oor die subjektiewe ontleding van die behandeling deur middel van vraelyste wat elke drie weke deur die pasiënte ingevul is. Elke groep is dan met homself vergelyk deur middel van die gepaarde T-toets. In die kontrole groep ($p = 0.623$), en

die eksperimentele groep ($p = 0.1002$) was daar geen beduidende statistiese verskil voor en na die studie nie. Dit is belangrik om uit te wys dat die "p" waarde van die eksperimentele groep nader aan 0.05 was as dié van die kontrole groep. Wanneer die pasiënte se siening van die behandeling tussen die twee groepe met die ongepaarde T-toets vergelyk was, was daar geen beduidende statistiese verskil ($p = 0.947$) tussen die twee groepe nie.

Subprobleem drie was die vergelykende ontleding van subprobleem een en twee. Daar was 'n positiewe ooreenkoms tussen die vrat-oppervlak en die pasiënte se waarneming van die behandeling in die eksperimentele groep ($p = 0.0225$ en $r = 0.8246$). 60% persent van die pasiënte in die eksperimentele groep het verbetering getoon, 20 persent se toestand het verswak en 20 persent het geen verband getoon tussen subprobleem een en twee nie. Daar was 'n swak ooreenkoms tussen die vrat-oppervlak en die pasiënte se waarneming in die kontrole groep ($p = 0.9957$ en $r = 0.0025$). 33.33% van die pasiënte in die kontrole groep het verbeter, 46.67% het verswak en in 20% was daar geen ooreenkoms tussen subprobleem een en twee nie. Die afleiding kan dus gemaak word dat hoewel daar geen beduidende statistiese verskil was tussen die eksperimentele en kontrole groep nie, was daar 'n meetbare verskil tussen die twee groepe volgens die herhaling van die verskynsels. Homopatie het dus 'n rol om te speel in die behandeling van vratte.

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Introduction

Immediate background of the problem

Under certain circumstances Warts have the potential to become malignant (Bolton, 1991). The occurrence of Warts on publicly visible parts of the body causes a certain amount of psychological stress to individuals that are sensitive to their appearance. The virus (Papilloma virus) that causes the formation of a wart, may be associated with other conditions/diseases (Lancet, 1987). When a patients immunity is compromised such as when taking immunosuppressive drugs after a kidney transplant, this predisposes the individual to infection by the Papilloma virus (Lancet, 1987).

Not much scientific research has been accomplished in the homeopathic treatment of warts and there are many different methods of treating warts homeopathically (Gupta, Bhardwaj and Manchanda, 1991) which need to be analyzed to determine which works best and why?, And whether in fact homeopathy has a place for treating warts.

Need for a solution to the problem

The public might not be aware that there is an alternative form of treatment for warts, and this study will demonstrate homeopathy's degree of proficiency.

Medical treatments for warts are not inexpensive and not without side-effects, homeopathic treatment will offer a more economical alternative and has no side-effects (Bolton, 1991 and Jouanny, 1991).

Warts have the capability to become malignant, which may be prevented if the immunity of the individual is increased (Bunney, 1982, Jouanny, 1991 and Shah & Buscema, 1988).

Description of a solution

A case history will be taken and a physical examination will be performed on each patient. Based on the case history and physical exam a homeopathic medicine will be prescribed. The homeopathic medicine will address the patients immune system, altering it in some way so as to increase resistance to infection by Papilloma viruses and increase the patients resistance to re infection (Jouanny, 1991).

Benefits that will come from solving the problem

The first benefit will be, adding an alternative method to the current knowledge of wart treatments. Wart treatment cost's will be lowered. homeopathy will receive more respect in the scientific community. Natal Technikon will receive credit for initiating and monitoring the research.

If we are allowed to show homeopathy's effectiveness in treating Warts, through this study we can pave the way to a future where individuals may be educated in other forms of treatment.

Feasibility of the solution

The homeopathic way is a feasible solution as it is low in cost, easy to implement and there are no side-effects in homeopathic treatment (Jouanny, 1991). The equipment needed for measurement is relatively inexpensive to purchase.

Chapter one: The problem and its setting

1.1 Statement of the problem

This study proposes to determine the degree of proficiency of homeopathy in the treatment of various types of warts, with reference to the clinical manifestations of the warts and the patients perception to the treatment in order to determine the role of homeopathy in wart treatment.

1.2 Statement of the subproblems

Subproblem 1 proposes to determine the degree of proficiency of homeopathy in the treatment of various types of warts with reference to the clinical manifestations of the warts in order to evaluate the relationship between homeopathic treatment and the clinical manifestations of the warts.

Subproblem 2 proposes to evaluate the proficiency of homeopathic treatment with reference to the patients perception to the treatment in order to establish what aspects of the wart treatment patients consider significant.

Subproblems 3 proposes to integrate the data collected on clinical manifestations of the warts and the patients perception to the treatment in order to determine the role of homeopathy in wart treatment.

1.3 The hypotheses

Hypothesis 1 states that there is a relationship between homeopathic treatment and the clinical manifestations of the warts, which can be measured.

Hypothesis 2 states that there is a relationship between homeopathic treatment and the patients perception to the treatment, which can be measured.

Hypothesis 3 states that it is possible to integrate, collected data on the patients perception to the treatment, their clinical manifestations and the Homeopathic treatment given, allowing the integrated data to demonstrate the role homeopathy may play in the treatment of warts.

1.4 Delimitations

- 1) This study will not accept any subject that is undergoing some other form of treatment for their warts.
- 2) This study delimits itself from any other form of treatment except homeopathy.
- 3) This study will delimit itself from the explanation of how homeopathy works on a biochemical level in the treatment of warts.

1.5 Assumptions

- 1) In this study only one form of treatment is allowed, and therefore once this study has begun it is assumed the patients will not take any other form of medication for their warts.
- 2) Homeopathy is based on the law of Similars (Similimum), therefore it is assumed that this principle is valid.
- 3) Once the study commences the patient will be required in a disciplined manner to take a prescribed amount of homeopathic medicine per day, therefore it is assumed that the patients will participate unconditionally, take their medicine as directed not exposing the medicine to any situation that might antidote it.

1.6 Definitions of terms

1) *Similimum*

The term Similimum is the single homeopathic medicine, the drug picture of which most nearly approaches the total symptom complex of the patient.

2) *Repertorizing*

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

3) *Vital Force*

The term vital force is used in homeopathy and it implies that underlying all vital phenomena there is a life-giving, life-preserving, life-directing and integrating force in every living organism. It may be considered as the momentum of life (Gaier, 1991).

Chapter two : Review of Related Literature

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8. Conventional medical management of warts.
9. Homeopathic management and research performed on warts.
10. Method and specifications of photographing warts.
11. Conclusion.

1. Overview

In the literature review all aspects of warts relevant to the research project are investigated. The main areas to be investigated will be the various types of warts, their clinical features and diagnoses, conventional medical treatment of warts and its proficiency and the homeopathic treatment of warts.

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

Definition and Historical aspects of Warts

Warts also known as verrucae are benign tumours that commonly involve the skin and less frequently affect other epithelial tissues. These lesions are said to be induced by Papillomaviruses (PV's), which are deoxyribonucleic acid (DNA)-containing viruses (Lowy and Androphy, 1983). Warts have been recognized for a long time and it is interesting to note that the term verruca was first introduced by Sennertus originally meaning "a steep place" , because warts appear on the surface of the skin "like eminence's of little hills" (Bunney, 1982). In the past warts have been mistaken for other diseases, for example ancient Greek and Romans noticed anogenital warts were sexually transmitted but until the 18th century anal warts were considered to be some form of syphilis or gonorrhoea (Bunney, 1982).

It is interesting to note that through the ages and in different parts of the world, although the application of juices of plants and things like saliva and excreta were used in the treatment of warts, the majority of wart cures were based on the idea of transference. That is transferring the warts to another person or object e.g. Rubbing warts with pork fat, which was then hung in the sun to melt; Or rubbing the warts with a green alder stick which was then buried in the muck to rot (Bunney, 1982).

It was only within the last century that the infectious nature of warts was experimentally confirmed, where it was demonstrated that when the skin was inoculated with wart extracts new warts were induced (Bunney, 1982). A viral aetiology for warts was suggested due to the fact that warts developed at sites inoculated with wart infiltrate that were free of bacteria. Then with further studies and tests it was postulated that all warts were caused by a single agent. But recent studies have demonstrated that there are many forms of Human papilloma virus (HPV) types, of which several forms can co-exist in the same individual (Bunney, 1982), and that some forms are known to possess a regional predilection, biology and histopathology (Lowy and Androphy, 1983). Despite the advances, PV's are not reproducibly propagated in culture (preventing fulfillment of all Koch's postulates to establish an aetiological relation between PV infection and warts) which hampered research into the biology and genetics of PV's. Progress is being made with the use of recombinant DNA technology which has partially circumvented this obstacle (Lowy and Androphy, 1983).

In spite of modern sophistication, wart shrines are still found in Tokyo, in Great Britain people still rub warts with dung and wart charmers are still to be found. (Bunney, 1982).

Definition of homeopathy

According to Jouanny (1991): "Homeopathy is a therapeutic method which clinically applies the law of similars and which uses medicinal substances in weak or infinitesimal doses." The law of similars simply put means "The same things which cause the disease cure it" (Jouanny, 1991). Homeopathy has its origins rooted as far back as twenty five centuries ago in a well established and honorable school of medicine, that of Hippocraté (Boyd, 1981). The founder of homeopathy Samuel Hahnemann a German physician, chemist and toxicologist understood that the same things that cause disease can also cure it and formed the principle, "Similia Similibus Curentur". Hahnemann's hypothesis has been proven over and over again after many years of clinical trials and is no longer a hypothesis but a law of nature, now known as " *The Law of Similars* " (Scott and McCourt, 1983) and (Jouanny, 1991).

2. The aetiological agent.

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

Jouanny, (1991) goes on further to explain that the aetiological investigation is essential because the initial cause of the disorder was the first factor which set the entire defense mechanism into motion. This is particularly important where chronic diseases such as warts are concerned.

The Human Papilloma virus [HPV] is accused of being the viral aetiology of warts. The Papilloma virus is a subgroup of the papovavirus family. "Papova" is derived from the words papilloma(pa) and vacuolating(va) (Bolton, 1991).

DNA sequencing studies have shown that wart viruses differ in their antigenic structure (Bolton, 1991). Shah and Buscema, (1988) explain there are over fifty distinct HPV's that have been characterized [Bolton, (1991) mentions that to date 57 genotypes of HPV have been identified]. The HPV genome is a double stranded DNA molecule with about 8000 base pairs. HPV's infect squamous epithelia at many body sites and are broadly divided into those infecting the skin and those infecting the mucosal surfaces, but this distinction is not absolute. Individual HPV types exhibit a marked degree of specificity with respect to lesion morphology. HPV-1 is the predominant type in plantar warts, HPV-2 in common warts, HPV-3 and HPV-10 in flat cutaneous warts, and HPV-6, 11, 16, 18, and 31 account for a large majority of genital infections. Only some HPV types appear to be oncogenic.

In patients who have received immunosuppression to prevent organ rejection or who are immunosuppressed as a result of cytotoxic therapy, warts are not banal, mundane or trivial but are multiple, painful and frequently extremely resistant to therapy (Lancet, 1987: editorial). A few types of studies have been conducted on the HPV types in the warts of renal transplant patients, most of which appeared to contain the commoner non-oncogenic HPV types although some did contain HPV-5 (Gassenmaier, Fuchs, and Schell et al, 1986) and (Rudlinger, Smith, and Bunney et al, 1986)

3. Infectivity and transmission

In homeopathy it is important to know how the virus is spread in order to educate patients, but more pertinent to the study it demonstrates how susceptible individuals obtain the disease. The manner of transmission might also shed light on the type of lifestyle the susceptible individual leads [Homeopathy always looks at the bigger picture, to homeopaths a patient's lifestyle, personal habits, likes and dislikes all have significance, individually or collectively they may point to various medicines, (Jouanny, 1991)]. The manner of infection is also important because it points to areas that the treatment must address {The homeopath, depending on the individual case will treat lesionally, constitutionally and then address the fundamental chronic diseases [Miasms], (Jouanny, 1991)}.

Infection occurs when fragments of infected stratum corneum either from individuals own warts or from some other person, enters the skin through small abrasions. Penetration of the virus is assisted by firm pressure or friction. If the surface of existing warts and skin (stratum corneum) is softened or macerated (by prolonged or repeated immersion in water) then the infected material may become detached, normal skin may become damaged and inoculation can occur. Therefore the proximity of warts is very important (Shah and Buscema, 1988).

It has been demonstrated that new warts occur more frequently in individuals with warts than those without. This may be due to warts that are already present re infecting the individual, or the individual may be susceptible to the virus [i.e. A weakness in his/her defense mechanism] (Bunney, 1982).

Certain occupations such as butchers, fish mongers or poultry processors have massive crops of hand warts, because the hands are subjected to trauma and a constant state of maceration [by immersion in water and tissue fluids] (Bunney, 1982). The non slip texture of swimming pool floors causes abrasion to swimmers feet, allowing infected material [from the surface of plantar warts] to enter possibly causing the formation of warts (Gentles and Evans, 1982).

The chances of warts developing from inoculation of infected material depends on the amount of virus present and the immune status of the individual towards warts (Bunney, 1982).

4. Pathogenesis and Pathophysiology of warts.

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

Bolton (1991), pathologically describes most warts as well-circumscribed areas of epithelial thickening. Bolton, (1991) also mentions that warts never invade the dermis or subcutaneous tissue, and that HPV have only been seen in the nuclei and nucleoli of the stratum granulosum and keratin layers of the upper epidermis. Shah and Buscema (1988), state that warts are probably monoclonal in origin, arising from one or few cells in the basal cell layer of the epithelium. They also presume that viral DNA is present in all cells of

the wart, but the viral particles are produced mainly in the upper, better differentiated, granular layers of the epithelium.

5. Clinical manifestations

This research project is attempting to investigate how proficient homeopathy is in treating warts, and it is imperative that the researcher be able to recognize warts (and differentiate them from similar conditions i.e. differential diagnosis) in order to research and treat them. It is also important for the researcher to understand the classification of warts, because the different types of warts require different treatments and identifying the type of wart before treatment may increase the likelihood of cure (Bolton, 1991). The third and possibly the most important reason for investigating the clinical manifestations of warts is the fact that this research project uses the visual clinical manifestations of warts as one form of measurement.

Bolton, (1991) describes a method of differentiating warts from other similar looking conditions;

- First distinguish warts from corns- debridement of a corn reveals a single "eye" (called the "hen's eye"). In contrast to this debridement of warts reveals small haemorrhagic spots, or "roots". The spots are due to repetitive trauma to the capillaries feeding the wart. The plugs of epidermal and capillary proliferation can be seen more readily through a glass slide placed over a freshly debrided area and lightly compressed. Definitive diagnosis of warts is achieved by electron microscopy, immunohistochemical techniques or nucleic acid hybridization,

but these are unrealistic clinic options. HPV cannot be cultured (Androphy, 1989).

- The next problem found in the diagnosis of warts is differentiating a healed wart scar from a recurrent wart. A healed scar displays a sharp margin surrounding the lesion. Wart recurrence is often denoted by a vegetative border. Recurrence is often associated with an area of central clearing.
- The only other clinically significant lesion confused with warts is molluscum contagiosum, in which the lesions resemble flat warts. The diagnosis is decided on by observing the central dimple of the molluscum and its characteristic pearl, which is found after curetting.

Human papillomavirus-induced plane warts most often occur in the second decade of age, after which they either spontaneously regress or are eradicated in the process of various treatments. Common warts appear as smooth skin-coloured papules. As warts enlarge their surface becomes irregular and hyperkeratotic. Warts usually occur on hands but may be seen on the face and genitalia, and are frequently multiple. Spontaneously regressing plane warts may present clinically as red, swollen papules or sometimes as vesicles (Rogozinski, Jablonska and Jarzabek-chorzelska, 1988).

Bolton (1991), categorizes warts according to the HPV genotypes into five classes depending on the type of lesion;

1. *The common wart* (verruca vulgaris)- is most frequently found on the hand especially in the periungual area. They are elevated, circumscribed and flesh-coloured or grayish, with horny projections on the surface.

2. *The plantar wart* (verruca plantaris)- normally occurs on the plantar surface of the foot, usually at the heel and metatarsal heads. These types of warts are different in that they grow into the skin as opposed to growing outward, making them difficult to treat i.e. they have irregular downward proliferation of epidermal ridges, called rete pegs. Diabetics are particularly at risk to plantar warts; because of the obvious foot complications that can occur extreme care should be taken when treating these warts.
3. *The flat wart* (verruca plana)- most commonly found on the dorsum of the hands and on the face. In general they are multiple, small discrete papules. Some are found to be thin threadlike projections (verruca filiformis). They are able to spread rapidly by auto inoculation in a linear fashion. A problem with this type of wart is trauma from shaving. Regression of these warts involves entirely different histological changes from those seen with the common wart.
4. *The venereal wart* (condyloma accuminata)- (Shah and Buscema, 1988) are described as being widespread, often subclinical and having an incubation period of three weeks to eight months and most virus positive women don't have clinically recognizable venereal warts. Shah and Buscema, (1988) also mention that of about a dozen genital tract HPV's, types 16 and 18 are strongly associated with squamous cell carcinoma of the cervix and other sites in the lower genital tract.
5. *Epidermodysplasia verruciformis*.- a cutaneous disorder that is regularly reported to progress to squamous carcinoma. It is associated mainly with HPV-5.

There are various special investigations, for the definitive diagnosis of warts and to discover which type of HPV is present. It is important for the researcher to be aware of these methods should the situation arise where a wart cannot be diagnosed by visual characteristics alone. According to Rogozinski, Jablonska and Jarzabek-chorzelska, (1988) a method of confirming diagnosis is by immunopathologic examination with the use of specific anti-HPV 3 serum. Shah and Buscema, (1988) explain that the HPV's may be identified on the basis of nucleic acid hybridization with reference probes.

6. Complications.

The Lancet (1987), reports that the exact role of the HPV in the aetiology of a wide range of malignancies is under investigation and that the HPV-5 is most consistently reported in cutaneous malignancies. HPV-5 is an uncommon type and is associated mainly with epidermodysplasia verruciformis, a cutaneous disorder that is regularly reported to progress to squamous carcinoma. Bolton, (1991) explains that in a recent study one HPV genotype (type 16) has been implicated as the cause of periungual squamous cell carcinoma. Shah and Buscema, (1988) report that the role of HPV's have been suspected in the aetiology of cervical carcinoma since the 1970's and that HPV-16 has been implicated especially in the aetiology of squamous cell carcinomas of the lower genital tract.

7. Wart regression and immunology.

The natural history of any disease is the period of time a disease exists without any form of medical intervention. The natural history of warts is important in this research project because it indicates to the researcher how long a patient may be treated for, prior to the warts resolving themselves.

There may be regression of warts after several months with or without treatment (Berkow, R., Bondy, P.K., Faling, L.J., Feinstein, A.R., Frenkel, E.P., Hoekelman, R.A., Petersdorf, R.G., Plum, F., Romano, J., Rossi, G.v., Talbott, J.H., Tanser, P.H. 1990).

Simultaneous disappearance of the virus from the stratum corneum, as provided by direct immunofluorescence, suggests that the virus bearing cells may be a prime target for immunocompetent cells (Rogozinski, Jablonska and Jarzabek-chorzelska, 1988). T-suppressor-subsets and macrophages were identified as the invading cells (Tagami, Aiba, and Rokugo, 1985). There is a temporary HPV specific stimulation of lymphocytes during regression of plane warts (Rogozinski, Jablonska and Jarzabek-chorzelska, 1988). It is postulated that the lymphocyte stimulation in the spontaneous regression exclusively of plane warts in patients with mixed plane and common warts is induced by the virus or virus associated wart antigen (Morison, 1975).

Some warts regress due to repeated low grade irritation which may be due to a variety of reasons that causes an immune reaction eradicating the wart (Tagami, Takigawa, and Ogino, 1977). Specific antibody production is not the mechanism of cure but rather the bodies response after the cell mediated mechanism has destroyed the

infected cells and has released the otherwise inaccessible antigens. This antibody response is likely to be the reason for life long immunity to warts that is seen in some individuals (Bolton, 1991). Monitoring of specific and non-specific cell-mediated immunity is of significance since its return to normal appears to be a prerequisite for spontaneous regression of plane warts (Rogozinski et al, 1988).

Rogozinski et al, (1988) explains that warts most often persist longer in immunocompromised hosts [proved by *in vivo* and *in vitro* tests] and that anti-HPV-directed, cell-mediated immunologic response plays a role in spontaneous regression of plane warts.

8. Conventional medical management of warts

It is important to review the conventional medical management of warts, because the researcher will then be able to compare its level of competency to that of homeopathic treatment thus ensuring that past treatments are not re-invented.

Bolton, (1991) describes the conventional medical management of warts:

- She first states that although spontaneous remission does occur, all warts should be treated to avoid spreading.
- *Common warts* should be treated with cryotherapy [liquid nitrogen is most commonly used], topical application of salicylic acid or occlusive taping. Cryotherapy is a convenient therapy if only one or two warts are present. Salicylic acids are used in the treatment of multiple warts, because of patient discomfort when a large number of warts are frozen. The liquid nitrogen is expensive

and may be a danger hazard due to its volatile nature. Cryotherapy may also cause scarring.

- *Plantar warts* are also treated with cryotherapy and salicylic acid.
- *Flat warts* are best treated with topical retinoids. This treatment cause less scarring than cryotherapy.
- Surgery is also an option in the treatment of warts and it includes total excision, blunt dissection and curettage. When surgery is used for plantar warts the excision may leave a scar on the bottom of the foot with the potential for long term morbidity.
- Recently laser therapy has been successfully used, but cannot be recommended as an initial treatment because of the cost involved. Laser therapy is more beneficial for large, recalcitrant warts due to the associated pain and morbidity.
- Chemotherapy- intradermal injection of bleomycin is another treatment for recalcitrant warts. It has a cure rate of 75%. Brief but severe pain occurs at the time of injection and this limits its use to a small number of warts at a time.
- Immunotherapy- recently intralesional interferon has been used to treat venereal warts. Dinitrochlorobenzene (DNCB) an immunologic sensitizer can sensitize the patients own immune system to non-specifically attack the wart virus. But this is a therapy of last resort since allergic side effects have been reported and concerns about mutagenicity have been raised. DNCB has a high cure rate, lack of scarring and a low recurrence rate.
- Hypnosis and suggestion therapies- have been successful in wart treatment (Johnson, 1980), however the success of these therapies may be secondary to an immune response in the host.

It is important for the researcher to be aware of the current medical research performed on warts because it may help avoid mistakes and suggest possible directions to follow. It may also assist the researcher in meeting significant personalities on the subject of warts and their treatment.

According to Bolton (1991), immunotherapy appears to have the greatest potential in wart research, because there is less scarring and more than one wart can be treated at a time. Wart tissues have been used to create autogenous vaccine by several groups of investigators, but to date however these vaccines have not been employed due to there concern over the use of DNA viruses containing oncogenes. Several medical centers are testing an extract prepared from immune lymphocytes called transfer factor. Poison ivy extract is another antigen extract that has been used successfully.

9. The homeopathic management and research performed on warts.

Warts are a manifestation of the sycotic reactional mode. The sycotic reactional mode or sycosis as it is more commonly known, is the name given to one of the chronic diseases states (miasms) in homeopathy (Jouanny, 1991).

These miasms are conditions which may be acquired or inherited, underlying chronic or recurrent disease states (Gaier, 1991)

Jouanny (1991) further elaborates sycosis as;

A reactional mode characterized by a slow, insidious, progressive development, general water retention in the tissues, chronic catarrh of the mucous membranes and the production of small cutaneous tumours that look like figs. Patients suffering from this predicament are usually characterized by being cold sensitive, aggravated by the cold and humidity, improved by movement and easily suffer from depression.

The following homeopathic remedies are essential in the management of sycosis and warts.

Thuja occidentalis, *Natrum sulfuricum*, *Antimonium crudum*, *Nitricum acidum*, *Causticum*, *Graphites*, *Dulcamara*, *Sabina*, *Silicea*, *Medorrhinum*, (Jouanny, 1991).

Calcarea carbonica, *Natrum carbonicum*, *Ferrum picricum*, *Sulfur*, *Antimonium tartaricum*, *Kalium muriaticum*, *Sepia officinalis*, (Clarke , 1987).

Acetic acid, *Ammonium carbonicum*, *Anacardium occidentale*, *Anagallis arvensis*, *Arsenicum bromatum*, *Aurum muriaticum natronatum*, *Baryta carbonica*, *Castorea*, *Castor equi*, *Causticum*, *Cinnabaris*, *Dulcamara*, *Kalium permanganicum*, *Lycopodium clavatum*, *Magnesia sulphurica*, *Natrum muriaticum*, *Rana bufo*, *Sempervivum tector*, *Staphysagria*, *Sulphuric acidum*, *X-ray*, *Euphrasia*, *Kalium iodatum*, *Mercurius corrosivus*, *Mercurius solubilis*, *Phosphoricum acidum*, *Ruta graveolens*, *Rhus toxicodendron*, *Anacardium orientale*, *Ferrum magneticum*, *Lachesis mutus*.

The researcher feels it is important to revise past and current homeopathic research on warts to prevent re-inventing the wheel. It may also assist the researcher in locating various relevant journals

and books, identifying significant personalities in the field and assisting in the methodology of this type of research project.

Gupta, Bhardwaj and Manchanda (1991), conducted a study where they proposed to "....find the role of homeopathic medicine in the treatment of various types of warts". This study had a sample size of sixty patients with the following types of warts; verruca vulgaris, verruca plantaris, verruca vulgaris and plana existing over various parts of the body. The study ran from December 1986 to August 1989. The researchers took a case history of all the patients especially focusing on the number, type and duration of warts. The researchers selected various homeopathic drugs on the basis of characteristic history and totality of symptoms. The following remedies were used; Thuja occidentalis, Ruta graveolens, Antimonium crudum, Calcarea carbonica, Nitricum acidum, Causticum, Natrum Muriaticum and Opium. All the drugs were used in different potencies. Most cases were treated with a single drug and no external applications or dietary restrictions were given to any of the patients. The researchers dispensed homeopathic drugs using the following methodology; a 30K potency was used thrice daily, the 200K potency twice daily and subsequent higher potencies once a day until improvement started, thereafter the cases were followed up with placebo until improvement ceased. In this study no patients were taken as control, because the researchers felt that there was a lack of information about the efficacy of the homeopathic drugs they employed.

The results of this study were as follows; from the 66 patients initially taken into the study, 14 dropped out and 52 remained. Out of the 52 cases warts disappeared completely in 47 cases, no change was observed in 3 and in 2 cases the number of lesions increased. Warts on any part of the body responded equally to treatment, no patients

reported any scarring after the treatment although it was found that in a few cases hyperpigmentation persisted for some time. In a one year follow up of this study no patient reported any recurrence.

The researchers feel that although the majority of patients responded to the homeopathic medicine in a favorable way, further investigation is needed as to how these drugs act on warts. The researchers conclude by saying, warts are a very erratic and unpredictable condition and in their study 28,6% of the warts cleared spontaneously without any drug. Therefore in order to prove the efficacy of homeopathic drugs, an in-depth study using the double-blind method should be employed.

10. Photographing and measuring the warts

As discussed per telephone with Dr. Jameson from Witwatersrand Medical School (1993), he recommended that light blue cloth is placed behind the patient. A shutter speed of ± 60 . The aperture should be 16 or 22, but not less than 16. There should be standard conditions for the photographing of the warts in each patient (the specifications for each patient should be recorded and observed, there should be set lighting, set shutter speed and the aperture varies). A macrolens with or without a ringflash may be used. The film type should be ASA100. The lighting in the room must be ample to prevent shadows. Good depth and field is needed. Dr. Jameson also suggested that the researchers should experiment first with photographing the warts to obtain optimum quality.

Mr. V Wait Head of Department of Photography at Technikon Natal (1993), suggested that for this type of photography a Nikon Medical lens should be used. Unfortunately due to budget constraints this was not possible as the item cost ten thousand rand. Mr. Wait suggested that we should use oblique lighting and possibly bounce this off a polystyrene board to soften the light and that a Kodak grey card should be placed next to the item one is photographing (for the first photograph of every spool) and ask the laboratory developing the film to ensure the grey card comes out grey. The flash being used must be of a reasonable quality else the light quality will change during the course of the research. (The following flash was recommended; A Metz 45 cti, but due to budget constraints a cheaper flash had to be purchased). The photographer must try to keep the depth of field high (highest F numbers), so that the surface of the wart and the skin below are in focus.

On interviewing a professional photographer Tony Smith (1993), he suggested that for this type of photography oblique lighting should be used with the aim of creating a shadow. The further away the lighting source is from the object to be photographed the less the fall-off. The flash should be fixed to a metal bracket which in itself is connected to the camera. Only one flash should be used because soft lighting is required. If more lighting is required place a piece of white cardboard behind the object being photographed. Two standard colours (grey and skin tone) should be placed in the first photograph of each spool, so that the type of development of all photographs may be standardized. The position of the flash along the metal bracket and the angle of the flash (trajectory) should be standardized. If fluorescent lighting is utilized, use a shutter speed that overpowers the fluorescent light. Smith (1993), also recommended two types of films that are used when working with skin tones; The AGFA Portrait

exposed at 100 ASA or the FUJI Reala. (Mr. Smith was recommended by the Head of Department of Photography at Technikon Natal Mr. V Wait).

Smith (1993) recommended the following way of calculating the size of the wart; after a wart has been photographed, place a transparency with a grid over the photograph and count the number of squares filled by the wart. An alternative to this method would be to use a filter on the camera lens that had a grid system on it and develop the photographs with a superimposed grid system.

Murrall (1993) a lecturer at the department of computer science University of Natal suggested a more accurate method of measuring the surface area of the warts. Using a clear transparency placed over the photographed wart, trace the wart outline. Scan this outline onto a computer, then using software developed by Mr. Murrall calculate the surface area.

11. Conclusion

Considering the homeopathic research performed by Gupta, Bhardwaj and Manchanda (1991) on warts, 28.6% of the warts they saw cleared spontaneously without any drugs. This study will therefore employ the double blind protocol with a control group receiving placebo medicine. This study will also make use of the method set out by Wait (1993) to photograph the warts and the method of Murrall (1993) to measure the warts.

CHAPTER 3: Materials and Methods

3.1 Criteria governing the admissibility of patients

Thirty patients suffering from various types of warts (excluding genital warts) were selected for the study. Patients were accumulated by advertising on bulletin boards and newspapers. Prior to patients taking part in the study they had to sign a consent form and comply with certain criteria;

3.1.1 The patients were not permitted to take any other treatment or medication (including homeopathic medication) for their warts.

3.1.2 Patients were not allowed to have taken homeopathic medication for their warts six months prior to the study.

3.1.3 Patients must reside in the greater Durban environment with easy access to Technikon Natal.

3.2 Criteria governing the admissibility of the data

3.2.1 Only data collected from the trial was accepted.

3.2.2 All interviews (the case history and repeat visits) were conducted personally by the researcher.

3.2.3 All questionnaires were completed in the presence of the researcher.

3.2.4 All photographs were taken personally by the researcher.

3.2.5 The purchase and development of the correct spools (AGFA portrait) was conducted at a reputable laboratory (FotoBar).

3.2.6 Only information concerning changes in the clinical manifestations of warts, collected from patients who have

taken homeopathic medication (made according to those principles set out in the Homeopathic pharmacopoeia) or placebo, will be accepted into this study.

3.3 The instruments

The data will be extracted using a questionnaire (Appendix A), which assesses the patients perception to the treatment and colour photographs.

An IBM personal computer will be used to measure the size of the warts and all data captured will be organized and stored on spread sheet (Microsoft Excel).

3.4 The methodology

Since the purpose of this study is to determine the degree of proficiency of homeopathy in the treatment of warts in terms of its clinical manifestations by obtaining data concerning the warts before and after treatment, the research methodology to be utilized will be the experimental method.

In this method we are determining the influence of an independent variable (Homeopathic treatment) on a dependent variable (the clinical manifestations of warts as presented by the patient) whereby the independent variable is manipulated to measure the effect on the dependent variable.

The experimental design utilized in this study will be a single variable design. The specific single variable design chosen is the "before-and-after with control". Two test units (groups of 15

patients) are utilized, one acting as the control and the other as the treatment group. The problem with this experimental method is that there is no control over the influence of extraneous forces which will cause secondary variations. This can be overcome by selecting sufficient number of test units at random. Randomization means that a random selection process is used to assign the treatments within the experiment. All sources of extraneous variation are largely controlled because treatment variables are equally exposed and equally affected by extraneous factors.

3.5 Method of prescribing

Frazer (1993) suggested the following method of prescribing; The patient should be treated on a chronic and local basis. I.E. A sycotic or terrain remedy should be prescribed once a week in conjunction with local remedies prescribed every day.

3.6 Administration

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

1. Advertise for patients in the Newspaper and on the notice boards at Technikon Natal and the University of Natal.
2. Assess whether the patients that responded to the advertisements are suitable for the study i.e. Delimitations.
3. A sample of thirty will be chosen.
4. A Case history and Physical examination (Appendix B) will be performed on all thirty patients.

5. The warts on all thirty patients will be photographed in colour (vertically above), with standardized lighting, photographic film, background colour and distance (equal zoom factor).
6. Each case will be repertorized and a prescription will be submitted to a homeopathic pharmacist.
7. The homeopathic pharmacist is a neutral member in the study and will randomly divide the sample of thirty in half, allocate valid homeopathic medication to fifteen and placebo medication to the other fifteen. (The researcher will not be aware as to which patient is receiving placebo medicine, thus making this a double blind study).
8. The homeopathic medicine is handed to the patients a day after taking the case history, giving the researcher time to analyze the case and correspond with significant personalities.
9. A period of twenty six days is allowed to pass during which the patients take their medication.
10. The case history and physical examination of all thirty patients is reviewed, and depending on the patients clinical manifestation their medication might change. (Should the medication for a patient change the prescription will be handed to the homeopathic Pharmacist who will then note whether to continue a placebo or prescribe a new medicine.)
11. Each patients warts will then be re-photographed and they will complete a questionnaire (Appendix A) determining their perception to the treatment.
12. The entire process is repeated seven times (I.E. Visit 1 ➡ Visit 8) allowing each patient a treatment time of six months. [(“Complete regression after several months is usual with or without treatment”) (Berkow et al, 1990)].
13. All the data collected will then be analyzed, interpreted and the hypothesis will be tested.

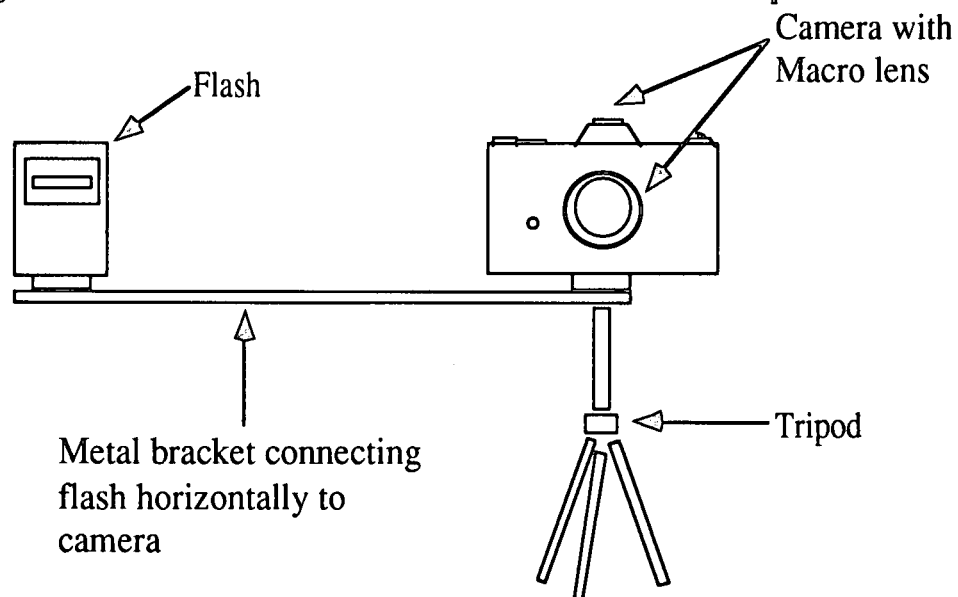
3.7 Statistical Analysis

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

3.8 Wart surface area analysis

The same set of photographic conditions existed for all thirty patients. The warts were photographed using a Chinon CM-7 SLR camera, a pentax macro lens, AGFA portrait spools (100 ASA) and a kobol 252 computer/slave flash.

Figure 3.8.1 : Camera and flash setup



The following parameters on the camera were adhered to;

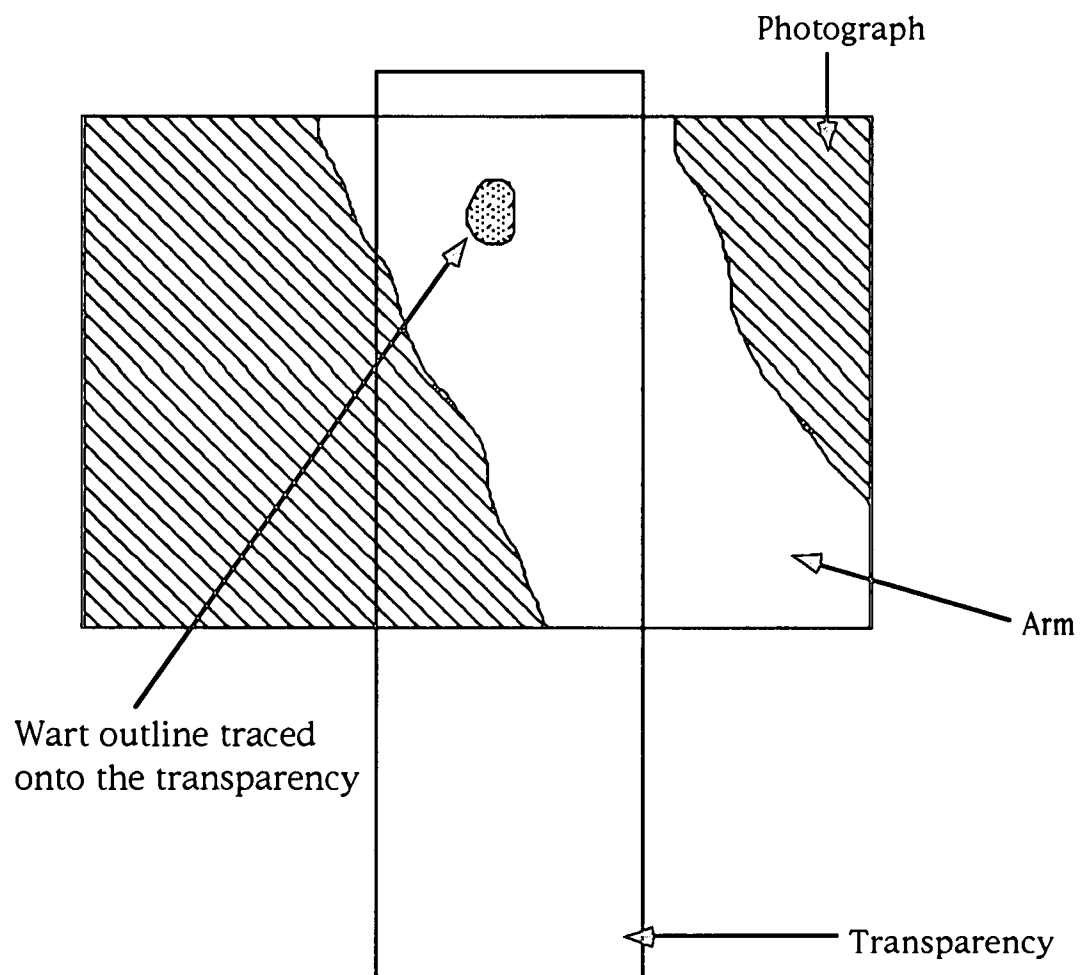
Aperture between 16 and 22;

Magnification factor of 2;

Shutter speed of 125.

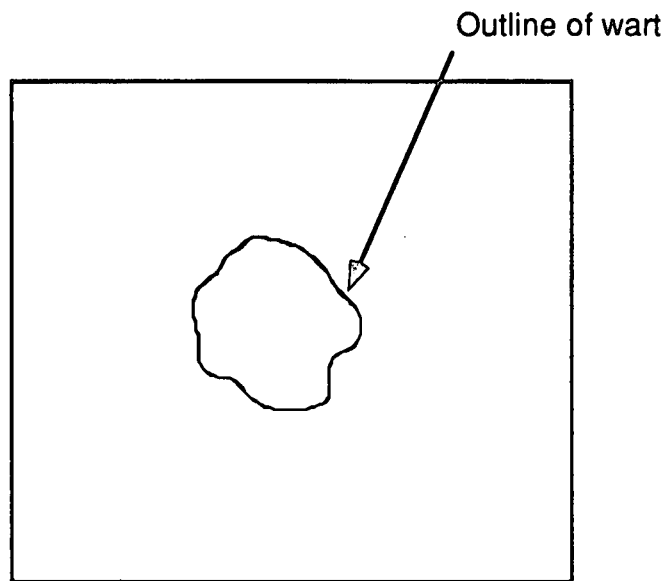
Once the warts have been photographed a transparency is placed over the photograph and the outline of the wart is recorded, as in figure 3.8.2.

Figure 3.8.2 : Method of wart outline



The outline of the wart on the transparency is then scanned onto a IBM compatible personal computer.

Figure 3.8.3 : Computer scanned wart



The computer then calculates the wart surface area using a program written by Murrall (1993).

CHAPTER 4 : *The Results*

The Paired T-test was used for the analysis of subproblem one and two. Correlation was used in subproblem three to determine if a relationship exists between the wart surface area and the patients perception to the treatment (Reich, 1993).

The wart surface area was measured in Cm^2 , and the questionnaire grading was measured in points (i.e. The lower the number of points per questionnaire the more positive the results are, and vice versa).

All the wart sizes (subproblem one) of both groups (treatment and control) were recorded and may be found in appendix C & D. All the perception questionnaire totals (subproblem two) of both groups were recorded and may be found in appendix E & F.

4.1 Hypothesis testing for Subproblem one

The Paired T-test was used to compare the initial wart surface areas (Visit 1) with the final wart surface areas (Visit 8) for both the control and treatment groups.

Table 4.1.1

This table contains values for the first and last wart surface area measurements for the Control group.

Pt Number	V 1	V 8
1	6.271	5.116
2	2.918	0.000
3	0.781	0.868
4	0.722	0.000
5	0.563	0.825
6	0.289	0.489
7	8.215	0.000
8	0.456	0.599
9	1.699	1.941
10	1.839	1.247
11	5.051	8.596
12	2.344	1.305
13	2.903	9.811
14	3.673	1.502
15	0.529	0.728

Pt= Patient.

V= Visit.

Table 4.1.2

Frequency table displaying rates of occurrence for the Control group.

GROUP	IMPROVED	NO CHANGE	WORSENER	TOTAL
Cntl Group	7 (46.67%)	0	8 (53.33%)	15 (100%)

Cntl= Control (indicative of the patients receiving placebo treatment).

The paired - t test was performed utilizing the values taken from table 4.1.1. The p value was calculated at 0.6790 and therefore the null-hypothesis could not be rejected.

Figure 4.1.1

The following graph is derived from the values in table 4.1.1, and it demonstrates the change in wart surface area for each member of the Control group. V 1 representing visit 1 and therefore the initial visit. V 8 representing visit 8 and therefore the final visit.

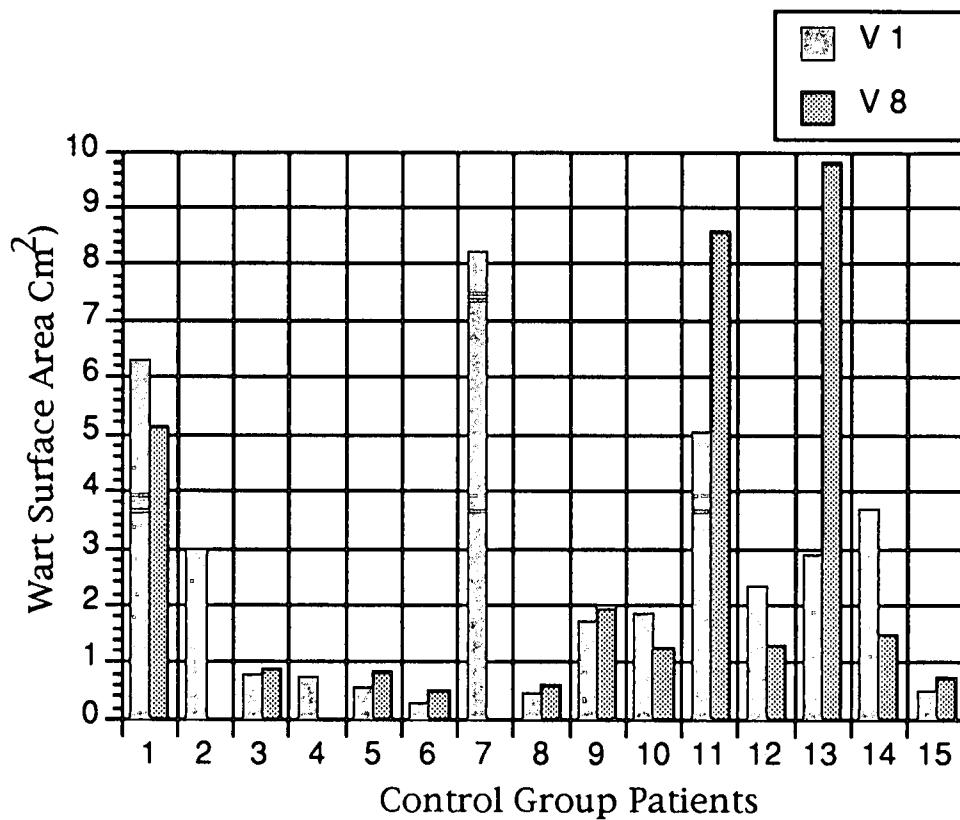


Table 4.1.3

This table contains values for the first and last wart surface area measurements for the Treatment group.

Pt Number	V 1	V 8
16	1.659	2.446
17	2.519	1.416
18	0.244	0.000
19	0.492	0.466
20	0.246	0.150
21	2.956	3.563
22	3.724	0.000
23	0.412	0.263
24	1.436	1.754
25	0.625	0.437
26	4.795	6.746
27	0.966	0.547
28	2.177	0.637
29	1.898	0.000
30	0.959	0.791

Pt= Patient.

V= Visit.

Table 4.1.4

Frequency table displaying rates of occurrence for the Treatment group.

GROUP	IMPROVED	NO CHANGE	WORSENE	TOTAL
Tx Group	11 (73%)	0	4 (26.67%)	15 (100%)

Tx= Treatment (indicative of homeopathic treatment).

The paired - t test was performed utilizing the values taken from table 4.1.3. The p value was calculated at 0.2644 and therefore the null-hypothesis could not be rejected.

Figure 4.1.2

The following graph is derived from the values in table 4.1.3, and it demonstrates the change in wart surface area for each member of the Treatment group. V 1 representing visit 1 and therefore the initial visit. V 8 representing visit 8 and therefore the final visit.

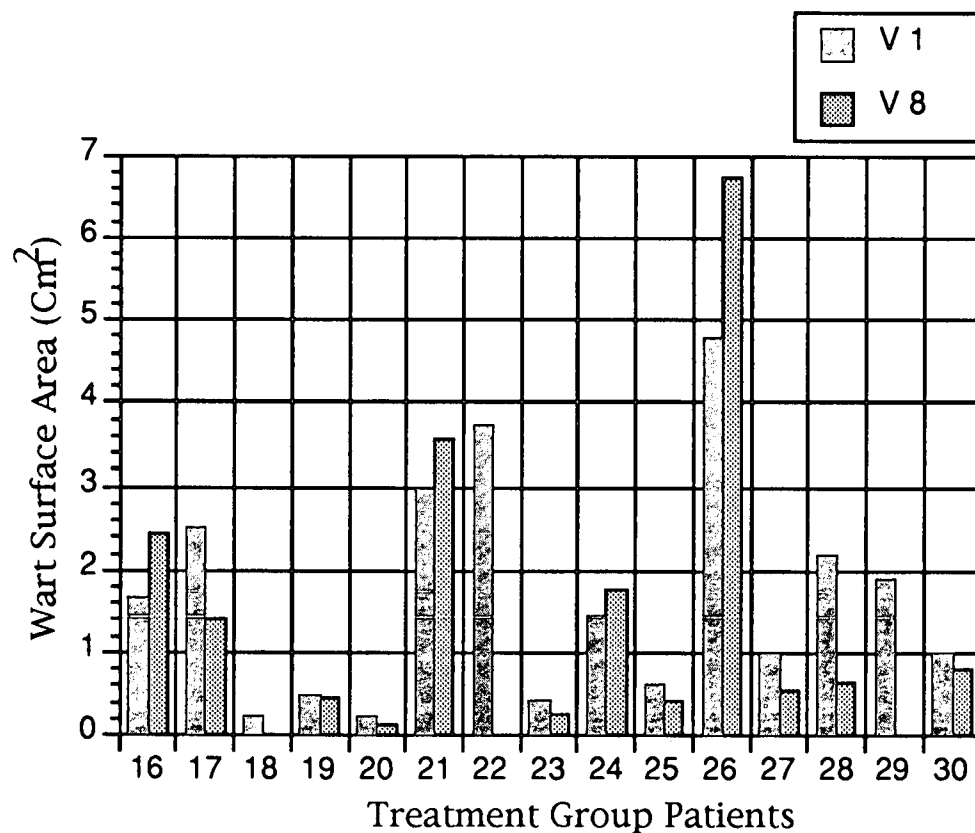


Table 4.1.5

The values in this table represent the difference between each visit. I.E. For the Control group $V_1 = 38.253$ and $V_2 = 43.180$, therefore the difference between the two ($V_1 - V_2$) is -4.927 . This value represents the change that occurred from visit one (V_1) to visit two (V_2).

**Subproblem
1**

DBV	Cntl group	Tx group
V1-V2	-4.927	3.729
V2-V3	5.832	0.221
V3-V4	0.308	-0.57
V4-V5	1.652	0.691
V5-V6	3.327	2.059
V6-V7	-0.587	0.023
V7-V8	-0.379	-0.261

Tx= Treatment (indicative of homeopathic treatment).

Cntl= Control (indicative of placebo treatment).

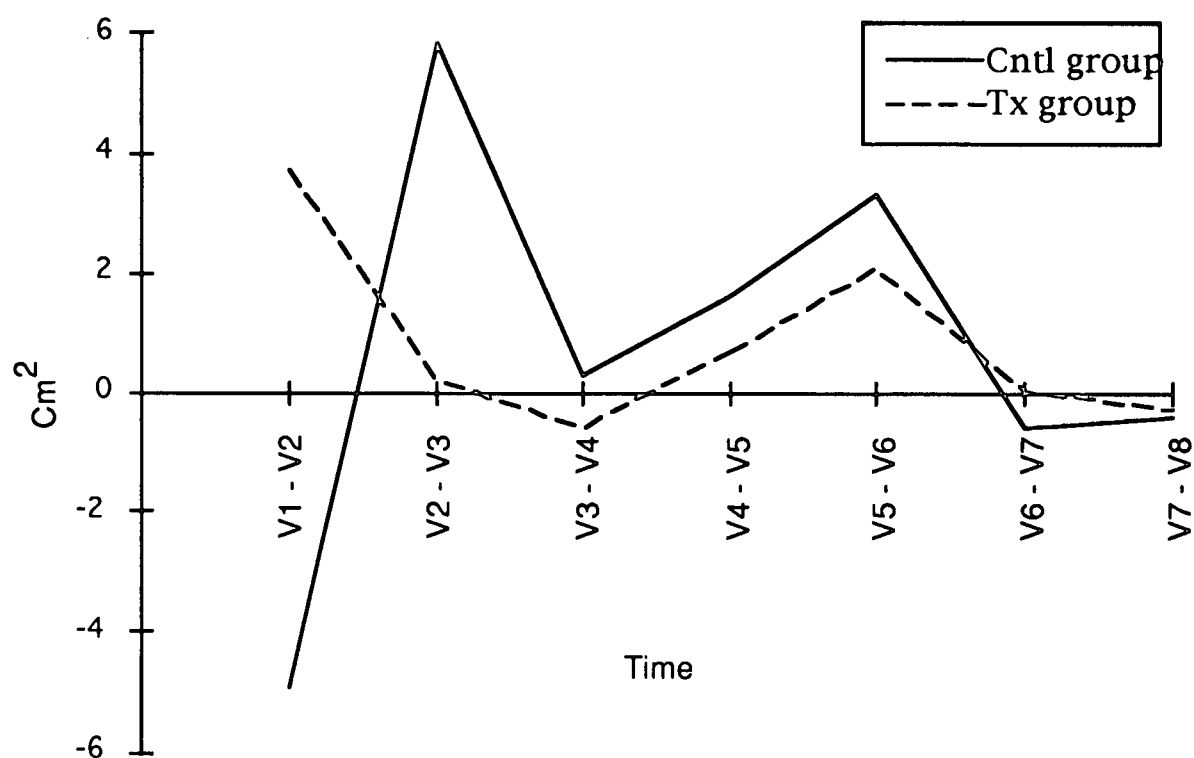
DBV= Difference between visits.

V= Visit.

The UN-paired T-test (2-tailed) was used to compare the change in wart surface areas of the *control group* against that of the *treatment group* using the values from table 4.1.5. A p value of 0.947 was calculated and therefore there was no significant difference between the *control* and *treatment group*. (I.E. The null hypothesis could not be rejected).

Figure 4.1.3

This graph was drafted using the values from table 4.1.5. It demonstrates the change (wart surface area) that occurred in each group (*Control and Treatment*) and the time in which the change took place.



4.2 Hypothesis testing for Subproblem two

The Paired T-test was used to compare the initial questionnaire scores (Visit 2) with the final questionnaire scores (Visit 8) for both the treatment and control groups. The questionnaire scores are measured in points. The lower the number of points per questionnaire the more positive the results are, and vice versa.

Table 4.2.1

This table contains values for the first and last questionnaire scores for the Control group.

Pt Number	V 2	V 8
1	13	16
2	11	0
3	9	13
4	7	0
5	10	14
6	14	16
7	15	6
8	19	14
9	9	17
10	10	10
11	30	46
12	13	12
13	39	46
14	14	11
15	10	16

Pt= Patient

V= Visit.

Table 4.2.2

Frequency table displaying rates of occurrence for the Control group.

GROUP	IMPROVED	NO CHANGE	WORSENE	TOTAL
Cntl Group	6 (40%)	1 (6.67%)	8 (53.33%)	15 (100%)

Cntl= Control (indicative of the patients receiving placebo treatment).

The paired - t test was performed utilizing the first and last set of values taken from table 4.2.1. The p value was calculated at 0.623 and therefore the null-hypothesis could not be rejected (I.E. There was no significant difference between the initial and final values).

Figure 4.2.1

The following graph is derived from the values in table 4.2.1, and it demonstrates any change in the patients perception to the treatment for each member of the Control group. V 2 representing visit 2 which was the first time the questionnaires were completed. V 8 representing visit 8 and therefore the final visit.

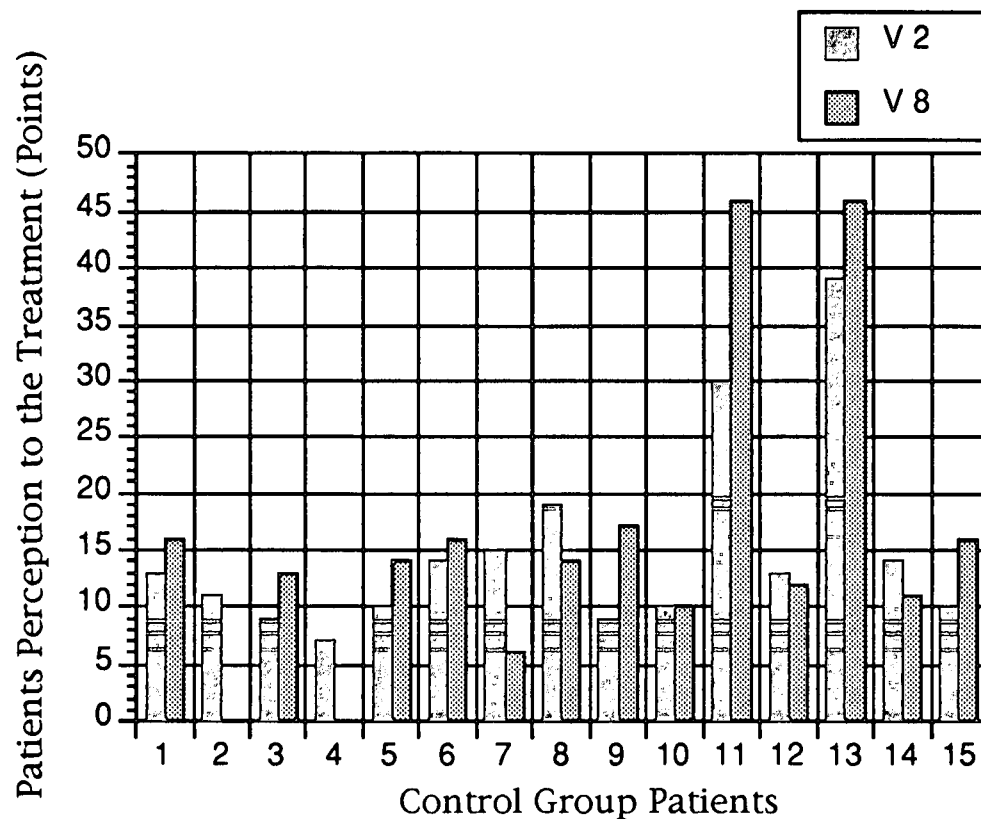


Table 4.2.3

This table contains values for the first and last questionnaire scores for the Treatment group.

Pt Number	V 2	V 8
16	17	21
17	7	6
18	6	0
19	6	9
20	15	10
21	12	13
22	0	0
23	13	8
24	14	15
25	10	8
26	16	16
27	16	10
28	18	8
29	30	0
30	13	13

Pt= Patient

V= Visit.

Table 4.2.4

Frequency table displaying rates of occurrence for the Treatment group.

GROUP	IMPROVED	NO CHANGE	WORSENER	TOTAL
Tx Group	9 (60%)	2 (13.33%)	4 (26.67%)	15 (100%)

Tx= Treatment (indicative of homeopathic treatment).

The paired - t test was performed utilizing the first and last set of values taken from table 4.2.3. The p value was calculated at 0.1002 and therefore the null-hypothesis could not be rejected.

Figure 4.2.2

The following graph is derived from the values in table 4.2.3, and it demonstrates any change in the patients perception to the treatment for each member of the Treatment group. V 2 representing visit 2 which was the first time the questionnaires were completed. V 8 representing visit 8 and therefore the final visit.

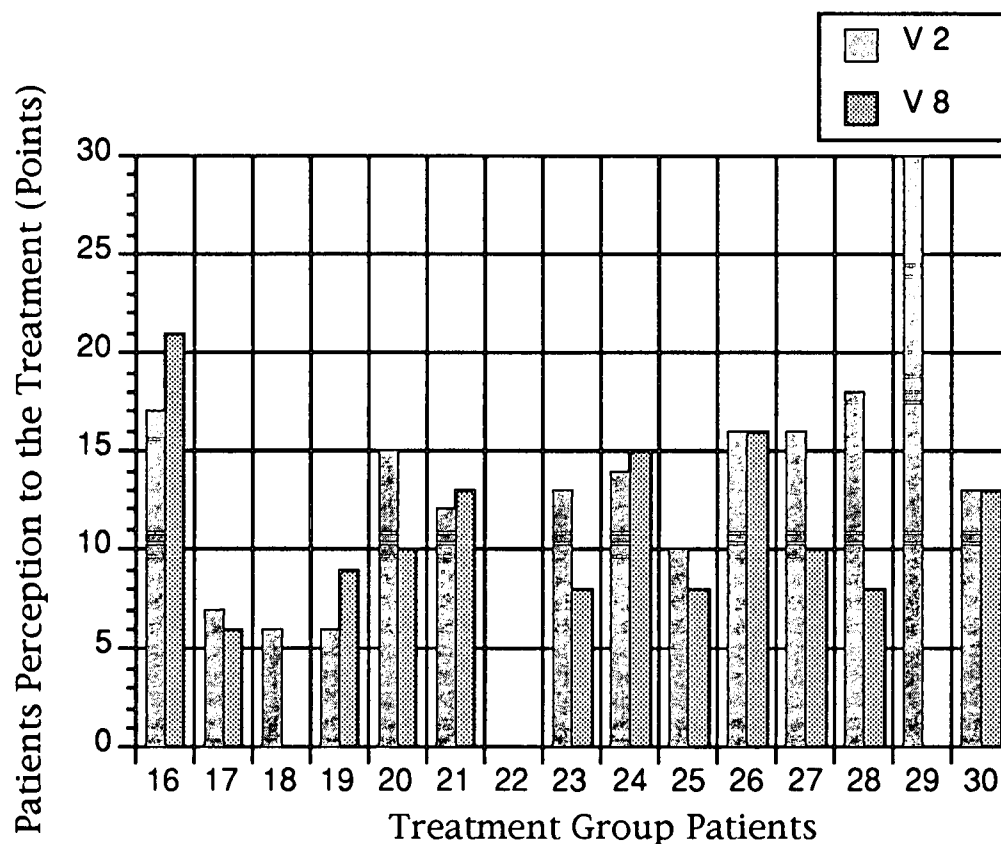


Table 4.2.5

The values in this table represent the difference between each visit. I.E. For the Control group V2= 223 and V3= 221, therefore the difference between the two (V2-V3) is 2. This value represents the change that occurred from visit two (V2) to visit three (V3).

Subproblem 2

DBV	Cntl group	Tx group
V2-V3	2	14
V3-V4	2	- 6
V4-V5	- 1	1
V5-V6	11	12
V6-V7	- 16	38
V7-V8	- 12	- 3

Tx= Treatment (indicative of homeopathic treatment).

Cntl= Control (indicative of placebo treatment).

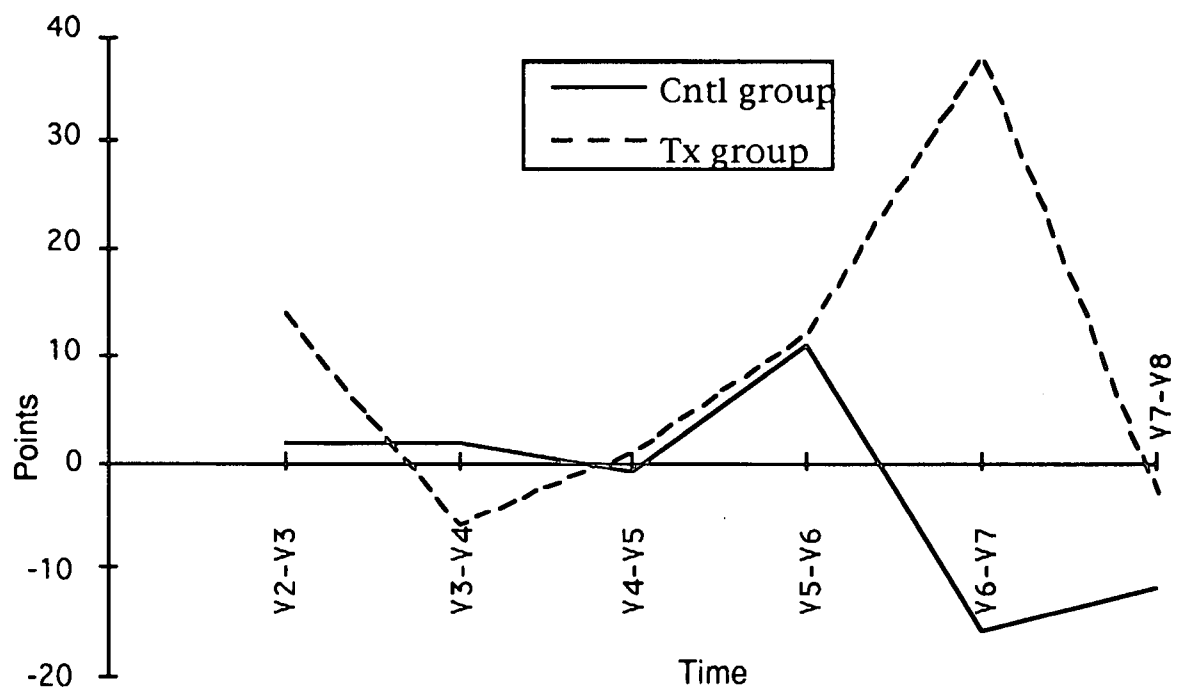
DBV= Difference between visits.

V= Visit.

The UN-paired T-test (2-tailed) was used to compare the perception to the treatment of the *control group* against that of the *treatment group* using the values from table 4.2.5. It was found that $p = 0.163$ and therefore there was no significant difference between the *control* and *treatment group*. (I.E. The null hypothesis could not be rejected).

Figure 4.2.3

This graph was drafted using the values from table 4.2.5. It demonstrates the change (patients perception to the treatment) that occurred in each group (*Control* and *Treatment*) and the time in which the change took place.



4.3 Correlation for Subproblem three

Table 4.3.1

The table that follows contains data obtained from the synthesis of subproblem one and two. Each amount under the column headed subproblem one is the sum of all the wart surface areas, of the specified group within the relevant time period. For example the first amount 25.107 Cm^2 represents the sum of all the wart surface areas of the treatment group at the onset of the study (i.e. V 1= first visit). Each amount under the column headed subproblem two is the sum of all the perception questionnaires, of the specified group within the relevant time period. For example the first amount 193 represents the sum of all the perception questionnaires of the treatment group at the second visit of the patients (i.e. V 2= second visit). It is important to note that for both the treatment (Tx) and control group the first amount (V 1) from subproblem two is absent. The reason for this is, the patients perception of the treatment questionnaire was completed for the first time on the patients second visit (V 2).

	Subproblem 1	Subproblem 2
	Wsa (Cm ²)	Pqt (points)
Tx group		
V 1	25.107	
V 2	21.378	193
V 3	21.157	179
V 4	21.727	185
V 5	21.036	184
V 6	18.977	172
V 7	18.954	134
V 8	19.215	137
Control group		
V 1	38.253	
V 2	43.180	223
V 3	37.348	221
V 4	37.040	219
V 5	35.388	220
V 6	32.061	209
V 7	32.648	225
V 8	33.027	237

Wsa= Wart surface area.

Pqt= Perception questionnaire totals.

Tx= Treatment (indicative of homeopathic treatment).

V= Visit.

Table 4.3.2

This table displays the correlation between subproblem one (wart surface area) and subproblem two (patients perception to the treatment) for the Treatment and Control group.

Group		Sub1 : Sub2
Tx Group	Correlation	0.8246
	Probability	0.0225
Control Group	Correlation	0.0025
	Probability	0.9957

Tx= Treatment (indicative of homeopathic treatment).

Sub1= Subproblem 1

Sub2= Subproblem 2

As can be seen with the Treatment Group there is a very good correlation between subproblem one and two, because both values (i.e. 0.8246) are very close to the value of one. The p value (i.e. 0.0225) is less than 0.05 further indicating that the correlation coefficient may be accepted. With the Control Group there is a poor correlation between subproblem one and two, because the value (i.e. 0.0025) is far from the value of one. The value [p] (i.e. 0.9957) is greater than 0.05 indicating that there is a poor correlation between the two subproblems.

Table 4.3.3

Frequency table displaying rates of occurrence for both the Treatment and Control group in subproblem three.

GROUP	IMPROVED	NO AGREEMENT	WORSENER	TOTAL
Tx Group	9 (60%)	3 (20%)	3 (20%)	15 (100%)
Cntl Group	5 (33.33%)	3 (20%)	7 (46.67%)	15 (100%)

Tx= Treatment (indicative of homeopathic treatment).

Cntl= Control (indicative of the patients receiving placebo treatment).

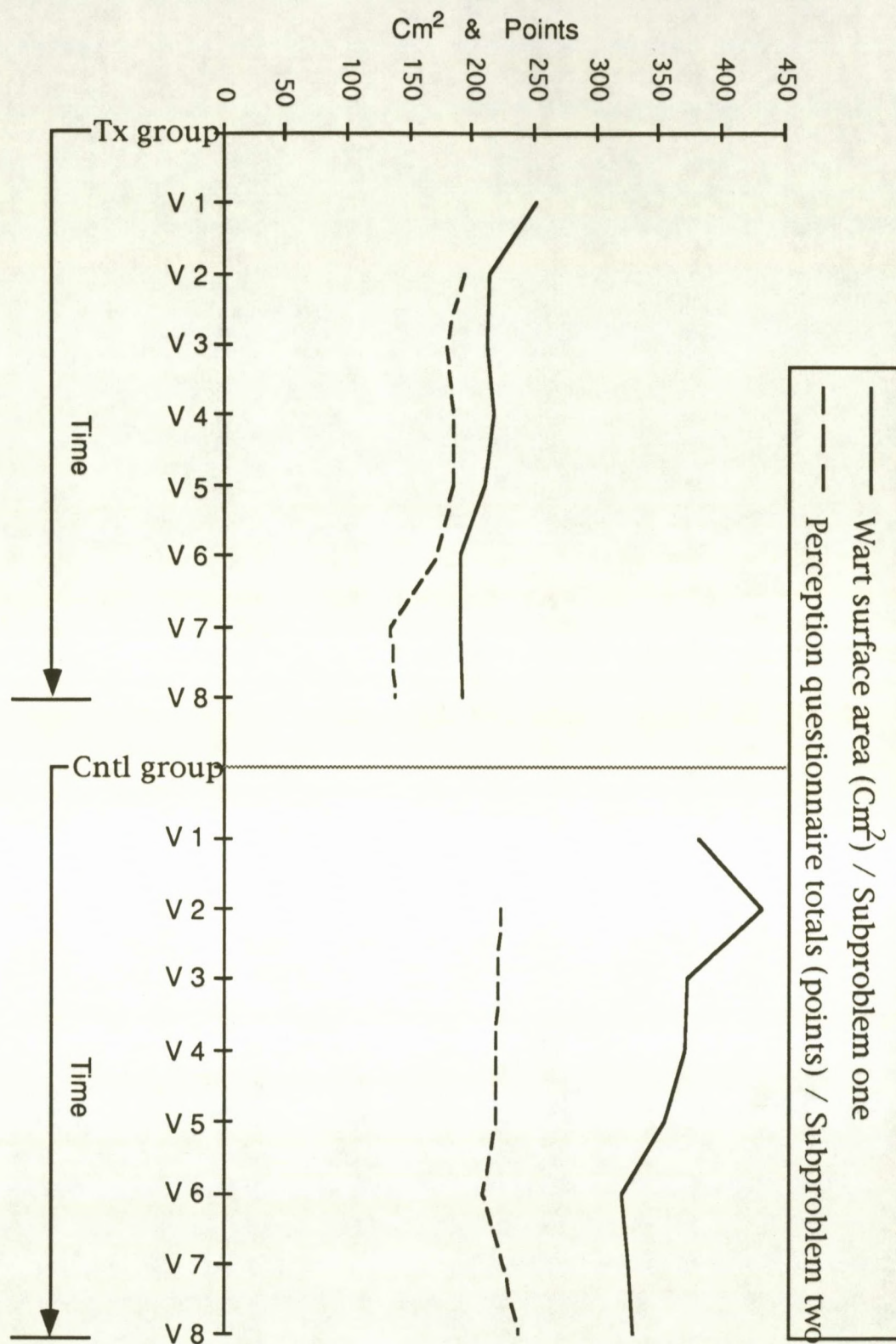
Improved= There was improvement in both subproblem one and two.

No agreement= There was a difference in results between subproblem one and subproblem two. I.E. Subproblem one might have shown improvement while subproblem two showed worsening or vice versa.

Worsening= There was worsening in both subproblem one and two.

Figure 4.3.1

The following graph is derived from the values in table 4.3.1 and it compares the wart surface area totals (subproblem one) to the perception questionnaire totals (subproblem two) for the Treatment (Tx) and Control group (Cntl).



CHAPTER 5 : *Discussion*

5.1 Introduction

The problem statement aimed at determining the degree of proficiency of homeopathy in the treatment of various types of warts so as to ascertain the role of homeopathy in wart treatment. This was achieved in three ways, I.E. Subproblem one, two and three.

Subproblem one: Focuses on the clinical manifestations of the warts (i.e. Objective analysis).

Subproblem two: Focuses on the patients perception to the treatment (I.E. Subjective analysis).

Subproblem three: Compares the results of subproblem one and two (I.E. Comparative analysis).

A sample size of thirty was randomly divided into two equal groups by a homeopathic pharmacist (Frazer, 1993). One group (patients 1 ⇒ 15) called the control group received placebo medication. The second group (patients 16 ⇒ 30) called the treatment group received homeopathic medication.

5.2 *Subproblem one : Objective analysis*

The paired T-test was used to compare the initial (Visit 1) and final (Visit 8) wart surface areas for both the control and treatment groups.

5.2.1 Control group: A p value of 0.6790 was calculated indicating that the initial (Visit 1) and final (Visit 8) wart surface areas were not significantly different. Considering the frequency of occurrence; 46.67% of the patients improved, 53.33% of the patients worsened and none stayed the same.

5.2.2 Treatment group: A p value of 0.2644 was calculated indicating that the initial (Visit 1) and final (Visit 8) wart surface areas were not significantly different. Considering the frequency of occurrence in the treatment group, 73% of the patients improved, none stayed the same and 26.67% worsened. It is important to note that the p value of the treatment group was closer to the value of 0.05 than the control group and therefore more significant (Reich, 1993). This is confirmed by the fact that the treatment group had a greater percentage of improvement (73%) as opposed to the control group having only a 46.67% improvement. The corollary of this is that the control group showed a greater number of patients worsening (53.33%) as opposed to the treatment group (26.67%).

5.2.3 Comparing the control and treatment groups: The change in wart surface area of the *control* group was compared to that of the *treatment* group using the unpaired T-test and it was

found with a significance level of 95% that the two groups were not significantly different ($p = 0.947$).

5.3 Subproblem two : Subjective analysis

The paired T-test was used to compare the initial (Visit 2) and final (Visit 8) questionnaire scores for both the *control* and *treatment* groups.

5.3.1 Control group: A p value of 0.6228 was calculated indicating that the initial (Visit 2) and final (Visit 8) perception questionnaire scores were not significantly different. Considering the frequency of occurrence; 40% of the patients improved, 53.33% of the patients worsened and 6.67% stayed the same.

5.3.2 Treatment group: A p value of 0.1002 was calculated indicating that the initial (Visit 2) and final (Visit 8) perception questionnaire scores were not significantly different. Considering the frequency of occurrence; 60% of the patients improved, 13.33% stayed the same and 26.67% worsened. It is also worth noting that the p value of the treatment group was closer to the value of 0.05 than the control group and therefore more significant (Reich, 1993). This is confirmed by the fact that the treatment group had a greater percentage of improvement (60%) as opposed to the control group having only a 40% improvement. The corollary of this is that

the control group showed a greater number of patients worsening (53.33%) as opposed to the treatment group (26.67%).

5.3.3 Comparing the Control and Treatment groups: The change in patients perception to the treatment of the *control* group was compared to that of the *treatment* group using the unpaired T-test and it was found with a significance level of 95% that the two groups were not significantly different ($p= 0.947$).

5.4 Subproblem three : Comparative analysis

In this subproblem the data captured from subproblem one and two was compared and analyzed.

For the *treatment* group there was a good correlation ($r=0.825$) between the wart surface areas (subproblem one) and the patients perception to the treatment (subproblem two). This implies that when the wart surface area decreased the patients perceived a positive subjective opinion towards the treatment and when the wart surface area increased the patients perceived a negative subjective opinion towards the treatment.

Concerning the *control* group, there is a poor correlation ($r=0.0025$) between the wart surface areas (subproblem one) and the patients perception to the treatment (subproblem two). This implies that the patients did not always perceive (subproblem two) a change in the wart surface area (subproblem one) when in fact there was one, and the opposite is also true being that certain patients did perceive (subproblem two) a change in wart surface area (subproblem one) when in fact there was none.

Considering the frequency of occurrence for both the treatment and control group of subproblem three, three categories were devised

namely; *improvement* , *no agreement* and *worsening* . The category of *improvement* indicates that there was improvement in both subproblem one and two for the respective group. The same may be said for the category of *worsening*, indicating that there was a worsening in both subproblem one and two for the respective group. The category of *no agreement* indicates that there was a disagreement between the results of subproblem one and two i.e. The results of subproblem one may have been positive while those of subproblem two may have been negative and vice versa. In the *treatment* group, 60% of the patients improved, 20% worsened and there was no agreement with 20%. In the *control* group, 33.33% of the patients improved, 46.67% worsened and there was no agreement with 20%.

5.5 Conclusion

In both subproblem one and two the *control* group improved by the following percentages, 46.67% and 40% respectively. This may be attributed to the following factors; The wart surface area may have decreased irrespective of any treatment given i.e. The natural history of warts (Berkow et al, 1990), or as a result of the placebo effect (Griffiths, 1986). There may also have been a combination of both the natural history of warts and the placebo effect (Lawson and Richards, 1982).

In both subproblem one and two the *control* group worsened by the following percentages, 53.33% and 53.33% respectively. This may be a consequence of not receiving real medication and/or not being influenced by the placebo effect (Griffiths, 1986).

In both subproblem one and two the *treatment* group improved by the following percentages, 73% and 60% respectively. It is possible that this improvement was due to the effect of the homeopathic medication, but it is also possible that the warts resolved on their own due to their natural history (Berkow et al, 1990) or the placebo effect (Griffiths, 1968; Jospe, 1978; Parkhouse, 1963; Shapiro and Morris, 1978).

In both subproblem one and two the *treatment* group worsened by the following percentages, 26.67% and 26.67% respectively. In both cases the 26.67% of treatment patients that worsened may be due to the fact the wrong medicine was prescribed, but the probability of this is low as each case history, photographs, questionnaires and scripts were inspected by a qualified homeopath before dispensing of the homeopathic medication occurred. It is also possible that the patients did not comply with the correct protocol concerning the storage, method of taking the medication and the specified times to take the medication. The researcher aimed to minimize this possibility by interviewing each patient personally, clearly explaining how to store the medication, the physical manner and periodicity to take the medication.

Although the homeopathic and placebo medication did not show a statistically significant change within or between themselves from beginning to end of the treatment, the homeopathic medication (treatment group) did show improvement (26.67% improvement) over that of the placebo medication (control group). (Appendix G: Treatment efficacy table).

CHAPTER 6: *Conclusions and Recommendations*

6.1 *Conclusions*

This study proposed to determine the degree of proficiency of homeopathy in the treatment of various types of warts, with reference to the clinical manifestations of the warts and the patients perception to the treatment in order to determine the role of homeopathy in wart treatment.

When the homeopathic treatment was compared to the placebo treatment regarding the clinical manifestations of the warts and the patients perception to the treatment, there was no significant difference between the two.

No toxic side effects were reported for the period of the study, when compared to other allopathic studies carried out in the field (Bolton, 1991).

6.2 *Recommendations*

A larger sample size should be used which would give the study more credibility. This study was limited to a sample size of thirty by financial constraints.

Future studies should focus on specific remedies.

The researcher feels that the issue of placebo medicine should be addressed. I.E. One must consider the pro's and con's of placebo medicine. Although placebo medicine serves as a control and every

type of treatment has a certain amount of placebo potential (Griffiths, 1986), the researcher feels that the principle of ethics is at question here. Is it ethical to treat a patient with placebo medication when they are led to believe that they are receiving homeopathic medication? If the patients are told that they have a fifty percent chance of receiving placebo medication (as was done in this study) will they follow the protocol correctly regarding the manner of taking and storing the medication and how will this affect the number of patients becoming despondent with the study and dropping out ?

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Appendices

Appendix A

Questionnaire assessing the
patient's perception to the
treatment

Please note: This questionnaire is to be conducted personally by the
researcher.

Identifying data:

Name: _____

Patient Code: B_____

Date: ____/____/____

Telephone No: _____

Introduction

This research project investigates the homeopathic treatment of warts. We are trying to determine how proficient homeopathy is in treating warts, and whether in fact homeopathy has a place in the medical arena for such a treatment. Your honest participation in this research project will contribute to the homeopathic pool of knowledge and more important it will educate the public that there are other, safe and effective forms of treatment for warts. To sum up, this questionnaire is attempting to assess if you the patient is aware of any changes in your warts after taking the prescribed medication.

Your answers to the questions in this questionnaire will be regarded as strictly confidential and will be used for research purposes only.

Instructions

This questionnaire is of a multiple choice format and there are five questions in total. Read each question and choose the appropriate answer by circling the corresponding number with a pen. Only one answer per question may be chosen. Answer question five only if it is applicable.

E.g. Do you still enjoy the summer weather ?

I still enjoy the summer weather

①

I somewhat enjoy the summer weather

2

There has been no change in the way I feel about summer

3

I somewhat dislike the summer weather

4

I dislike the summer weather

5

In all the questions, the smaller the number chosen the more positive the response. All the questions have to be answered, and if there is something in the questionnaire that you don't understand please ask the researcher to explain.

Please answer this questionnaire with complete honesty.

1. Thus far how have you perceived the treatment to be ?

Excellent.	0
Very good.	1
Fair.	2
Neutral, neither +ve or -ve.	3
Not so good.	4
Not good at all.	5

2. Current number of warts_____

3. Has the number of warts on your body changed ?

All the warts on my body have disappeared.	0
There has been a definite decrease in number.	1
There appears to be a slight decrease in number.	2
There has been no change in number.	3
There appears to be a slight increase in number.	4
There has been a definite increase in number.	5

4. Has the size of your warts changed ?

- | | |
|---|---|
| All the warts on my body have disappeared. | 0 |
| Some or all of the warts have definitely decreased in size. | 1 |
| Some or all of the warts appear to have decreased in size. | 2 |
| There has been no change in the size of any of the warts. | 3 |
| Some or all of the warts appear to have increased in size. | 4 |
| Some or all of the warts have definitely increased in size. | 5 |

5. Is there a sensation of pain in any of the warts and if so how has this sensation changed? NB answer this question only if pain exists.

- | | |
|--|---|
| All the warts on my body have disappeared. | 0 |
| The sensation of pain has disappeared. | 1 |
| The sensation of pain has decreased. | 2 |
| There has been no change in the sensation of pain. | 3 |
| The sensation of pain has increased. | 4 |
| The sensation of pain has increased dramatically. | 5 |

Appendix B

Standard Diagnostics Case History

Date of History:

Identifying Data

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

Age:

Sex:

Race:

Place of birth:

Marital Status:

Occupation:

Religion:

Source of referral:

Source of History:

Reliability:

Past Surgical History:

Any operations since you were born ?

Past Medical History:

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

1) Have you ever had any serious medical problems ?

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

2) Can you remember your childhood illnesses ?

3) Have you ever been in hospital for anything ?

4) Do you have any allergies ?

(Tetanus, Pertussis, Diphtheria, Polio, Measles, Rubella, Mumps,
Influenza, Hepatitis B, Haemophilus influenza type B)

5) What vaccinations / immunizations have you had recently or previously?

(Know: onset, duration, dosage)(Pill, vit's ,Homoeopathic medicine,
Minerals, Herbs)

6) Are you taking any medication ?

(Onset, Amount/Day, Type)

7) Do you smoke ?

(Onset, Amount/Day, Type)

8) Do you drink any form of alcohol ?

Family History:

1/ Are both your parents alive ?

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

1.2/ If any of them died why ? and when ?

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

2.1/ If not how did they die and when ?

2.2/ Did your siblings have any medical problems ?

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

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

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

(Duration)

Main Complaint: What seems to be the problem today ?

(Onset, Location, Aetiology, Duration, Character, Modalities, Concomitants, Radiation, Patient's response to Symptoms & incapacity's)

History of the Main Complaint:

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

Principle Symptoms:

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

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

3/ Any recent shocks or grief's ?

4/ Sleep patterns ?

5/ Diet ?

Psychosocial History:1/ Home situation and significant others ?

2/ Daily life ?

3/ Important experiences ?

4/ Religious beliefs ?

5/ The Patient's outlook ?

Summary of thoughts and hypothesis:

Systems review;

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

1) General :

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

2) Skin:

(Headaches, Head injuries)

3) Head:

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

4) Eyes:

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

5) Ears:

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

6) Nose & Sinuses:

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

7) Mouth & Throat:

(Swollen glands, Pain or stiffness in the neck)

8) Neck:

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

9) Respiratory system:

(Heart trouble, High Blood pressure, Rheumatic fever, Heart murmurs, Chest pain or discomfort, Palpitations, Dyspnoea, Orthopnoea, Paroxysmal nocturnal dyspnoea, Oedema, Any heart tests)

10) Cardiac system:

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

11) Gastrointestinal system:

(Polyuria, Nocturia, Burning or Pain on urination, Haematuria, Urgency, Reduced caliber or force of urinary stream, Hesitancy, Incontinence, Urinary infection, Stones)

12) Urinary system:

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

13) Genitoreproductive system:

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

14) Peripheral Vascular system:

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

15) Musculoskeletal system:

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

16) Neurological system:

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

17) Haematologic system:

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

18) Endocrine system:

(Nervousness, Tension, Depression, Memory loss)

19) Psychiatric:

On Examination (O/E):

Vital Sign's;

Pulse:

Respiration:

Blood pressure:

Temperature (°C):

Weight & Height:

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

General inspection:

General examination:

1) Position the Patient on their backs at 45°

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

2) Hands:

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

3) Forearm->Arm->Shoulder:

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

4) Neck:

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

5) Face:

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

6) Eyes:

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

7) Nose:

(Pain, Headache's, Post nasal drip)

8) Sinuses:

(Colour, Lesions, Pain)

9) Lips:

(Bad breath, Taste, Lesions, Pain)

10) Mouth:

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

11) Teeth:

(Bleeding, Colour)

12) Gums:

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

13) Tongue:

(Inflammation, Pain, Tonsils, Deposits, Voice)

14) Throat:

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

15) Ears:

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

16) Thorax and Lungs:

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

17) Heart:

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

18) Abdomen:

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

19) Back:

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

20) Pelvis & Perineum:

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

21) Lower limbs:

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

22) Feet:

Additional homeopathic questions:

Mind;

1) Fears:

(Position, Type, Dreams, On waking)

2) Sleep:

3) Confusion/Cloudiness:

4) Excitement:

5) Anxiety:

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

6) Speech:

7) Imagination:

8) Memory:

Emotions;

1) Depression:

2) Melancholia:

3) Mood:

Physical;

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

1) Diet:

2) Best time of day:

3) Coast or inland:

(Arsenicum album)

4) Particular:

(Calcarea carbonica)

5) Brittle hair:

6) Modalities:

a) Cold / Warmth:

b) Movement / Rest:

c) Touch:

d) Inside / Outside:

e) Riding in car:

f) Humidity / Dryness:

g) Sitting still / Changing position:

h) Time of day:

i) Thirsty / Not thirsty:

j) Itchy / Not itchy:

k) Seaside / Inland

l) Consolation / No consolation:

m) Morning upon awakening:

n) After meals:

o) Winter / Summer:

p) Strong pressure:

q) Dark:

r) Standing still:

Differential Diagnosis

Appendix C

Subproblem one: Control group.

This table contains data regarding the wart sizes of each of the patients receiving placebo medicine for the duration of the research project.

Name	V 1	V 2	V 3	V 4	V 5	V 6	V 7	V 8
1	6.271	5.519	5.860	5.084	4.988	5.262	5.356	5.116
2	2.918	1.563	0.482	0.404	0.000	0.000	0.000	0.000
3	0.781	0.749	0.869	0.858	0.829	0.791	0.852	0.868
4	0.722	0.914	0.000	0.000	0.000	0.000	0.000	0.000
5	0.563	0.691	0.686	0.756	0.761	0.788	0.746	0.825
6	0.289	0.443	0.434	0.418	0.435	0.463	0.450	0.489
7	8.215	7.850	3.442	3.015	2.700	0.000	0.000	0.000
8	0.456	0.621	0.560	0.582	0.398	0.433	0.375	0.599
9	1.699	1.450	1.444	1.578	1.786	1.791	1.872	1.941
10	1.839	1.553	1.792	1.711	1.573	1.315	1.290	1.247
11	5.051	5.539	6.760	8.466	8.177	8.555	8.658	8.596
12	2.344	2.245	2.173	1.444	1.282	1.124	1.339	1.305
13	2.903	8.848	9.971	9.688	10.246	8.945	9.269	9.811
14	3.673	4.209	2.217	2.369	1.476	1.912	1.744	1.502
15	0.529	0.987	0.658	0.668	0.738	0.682	0.697	0.728

V= Visit.

Appendix D

Subproblem one: Treatment group.

This table contains data regarding the wart sizes of each of the patients receiving Homeopathic medicine for the duration of the research project.

NAME	V 1	V 2	V 3	V 4	V 5	V 6	V 7	V 8
16	1.659	2.140	2.465	2.705	2.536	2.537	2.308	2.446
17	2.519	2.158	1.883	2.270	1.938	1.654	1.642	1.416
18	0.244	0.172	0.205	0.255	0.243	0.000	0.000	0.000
19	0.492	0.368	0.323	0.379	0.432	0.473	0.454	0.466
20	0.246	0.235	0.264	0.169	0.148	0.156	0.120	0.150
21	2.956	2.847	2.846	3.283	3.274	3.336	3.757	3.563
22	3.724	0.000	0.000	0.000	0.000	0.000	0.000	0.000
23	0.412	0.296	0.195	0.213	0.197	0.249	0.223	0.263
24	1.436	1.154	1.652	2.000	2.008	1.781	1.786	1.754
25	0.625	0.636	0.699	0.612	0.623	0.629	0.610	0.437
26	4.795	5.306	5.969	6.537	6.328	6.397	6.131	6.746
27	0.966	1.312	0.798	0.828	0.738	0.555	0.562	0.547
28	2.177	2.116	1.333	0.530	0.542	0.525	0.627	0.637
29	1.898	1.800	1.768	1.179	1.241	0.000	0.000	0.000
30	0.959	0.839	0.758	0.766	0.789	0.685	0.734	0.791

V= Visit.

Appendix E

Subproblem two: Control group.

This table contains data regarding the perception questionnaire of each of the patients receiving placebo medicine for the duration of the research project.

Name	V 2	V 3	V 4	V 5	V 6	V 7	V 8
1	13	10	12	12	15	16	16
2	11	6	5	0	0	0	0
3	9	9	11	12	10	12	13
4	7	3	0	0	0	0	0
5	10	9	11	11	12	12	14
6	14	14	14	15	13	15	16
7	15	17	19	15	6	6	6
8	19	12	14	15	17	16	14
9	9	12	17	17	15	16	17
10	10	10	11	10	9	8	10
11	30	32	31	30	35	43	46
12	13	14	8	11	10	12	12
13	39	44	45	47	44	44	46
14	14	12	11	11	13	12	11
15	10	17	10	14	10	13	16

V= Visit.

Appendix F

Subproblem two: Treatment group.

This table contains data regarding the perception questionnaire of each of the patients receiving homeopathic medicine for the duration of the research project.

NAME	V 2	V 3	V 4	V 5	V 6	V 7	V 8
16	17	43	44	42	37	17	21
17	7	5	6	7	6	9	6
18	6	6	13	13	1	0	0
19	6	6	8	10	11	10	9
20	15	18	9	7	11	4	10
21	12	13	19	16	16	15	13
22	0	0	0	0	0	0	0
23	13	9	9	8	10	9	8
24	14	12	16	14	13	13	15
25	10	12	15	15	15	14	8
26	16	10	12	14	16	14	16
27	16	8	12	11	9	8	10
28	18	7	3	7	8	9	8
29	30	18	7	7	8	0	0
30	13	12	12	13	11	12	13

V=Visit.

Appendix G

Treatment efficacy table

This table displays the various warts of the treatment group treated and the remedies used to treat them. The remedies found under the heading 'Basic Remedy/ies' are the chronic remedies used and if there is more than one, this indicated that the chronic remedy changed over the six months. The same holds true for the remedies found under the heading 'Local Remedy/ies' I.E. The fact that more than one occur for each patient does not mean that they were all prescribed at the same time, but rather in various combinations (most commonly two at a time) over the six month period. All remedies were prescribed according to Hahnemann's centesimal potencies (CH).

Key for table

V. vulg ⇒ Verruca vulgaris
V. plana ⇒ Verruca plana
V. plant ⇒ Verruca plantaris

Ign ⇒ Ignatia amara
Thuja ⇒ Thuja occidentalis
Nat s ⇒ Natrum sulfuricum
Caust ⇒ Causticum
Nat m ⇒ Natrum muriaticum
Calc c ⇒ Calcarea carbonica
Dulc ⇒ Dulcamara
Med ⇒ Medorrhinum
Graph ⇒ Graphites
Sil ⇒ Silicea

Calc f ⇒ Calcarea fluorica
Ant c ⇒ Antimonium crudum
Sepia ⇒ Sepia officinalis
Ars alb ⇒ Arsenicum album
Nit ac ⇒ Nitricum acidum
Lyc ⇒ Lycopodium clavatum
Puls ⇒ Pulsatilla
Ruta grav ⇒ Ruta graveolens
Kali m ⇒ Kalium muriaticum
Nux v ⇒ Nux vomica

Pt No	Type of wart/s	Basic Remedy/s	Local remedy/s	T E
1	V. vulg	Ign 30, Thuja 30, Nat s 30.	Caust 7, Nat m 9, Calc c 9, Calc f 9, Ant c 7, Sepia 7, Nat m 7.	- 1
2	V. plana	Ars alb 15, Thuja 30.	Calc c 9, Ant c 9, Nit ac 7, Ant c 7.	1
3	V. plana	Lyc 30.	Dulc 7, Dulc 9, Calc c 9, Thuja 7.	1
4	V. plana	Puls 30, Thuja 30.	Dulc 7, Med 9, Thuja 9, Ant c 9.	0
5	V. plana	Nat m 30.	Ruta grav 7, Caust 7.	1
6	V. vulg	Ign 30, Nat m 30, Thuja 30.	Graph 7, Ant c 7, Caust 7.	1
7	V. vulg	Calc c15, Thuja 30.	Graph 7, Ant c 7.	1
8	V. vulg	Ars alb 15, Thuja 30.	Dulc 7, Ant c 9, Nit ac 7, Kali m 3, Dulc 9, Ant c 7, Sil 9.	1
9	V. plant	Nux v 30, Thuja 30.	Ant c 7, Nit ac 7, Ruta grav 7.	- 1
10	V. vulg, V. plana.	Nat m 30, Thuja 15, Thuja 30.	Dulc 7, Lyc 9, Calc c 9, Nit ac 7.	1
11	V. plant	Sepia 15, Thuja 30.	Ant c 7, Nit ac 7, Ruta grav 9.	0
12	V. vulg	Lyc 15, Thuja 30.	Caust 7, Nit ac 9, Ant c 9, Dulc 9.	1
13	V. vulg	Sepia 30, Thuja 30.	Nat m 9, Ant c 7, Nit ac 7.	1
14	V. vulg, V. plana.	Thuja 15, Calc c 15.	Dulc 7, Caust 9, Ant c 7.	1
15	V. vulg	Thuja 30	Ant c 9, Nit ac 7.	0

Pt No = Patient number.

T E = Treatment efficacy. These values indicate the following:

- 1 ⇒ There was overall improvement.
- 0 ⇒ There was no agreement between subproblem one and two.
- 1 ⇒ There was overall worsening.