

Gathering the evidence

Monitoring the effectiveness of a homeopathic practice through an outcomes-based data collection system

by Barbara J Braun BSc(Hons) DO Dip Ac DHoM MIRCH
and Ruth M Odendaal LCPH



Barbara Braun was born in Swaziland, and completed a BSc (Hons) in Zoology at Reading University in the UK. She then qualified as an osteopath in the UK and later also as an acupuncturist and homeopath. She has been in private practice in Swaziland since 1986. In 2008 she co-founded the Swaziland Homeopathy Project with two British homeopaths, Julie Hodgson and Shirley Reece. The methodology was based on the Maun Homeopathy Project initiated by Hilary Fairclough in Botswana.



Ruth Odendaal was born in Zimbabwe and trained at the College of Practical Homeopathy, graduating in 2004. She has been a director and practising homeopath for the Swaziland Homeopathy Project for the past three years; prior to that she practised at an HIV clinic in Kings Cross, London and at Neals Yard Remedies. She was also a manager for the Richmond Shop and Therapy rooms. She practises a number of healing modalities such as Pleiadian light work, Magnified healing and Sekhem.

It is common knowledge that homeopathy as a therapy is currently undergoing a difficult period, and there is a need to provide good and unbiased evidence to demonstrate exactly how effective it is.

It was in this context that the Swaziland Homeopathy Project, a charity registered in the southern African country of Swaziland, decided to set up a system for gathering evidence of patient outcomes as a result of homeopathic treatment. Initiated in June 2008, the Swaziland Homeopathy Project (SHP) currently conducts on average 19 clinics per month. Most of these are free, mobile outreach clinics into the impoverished rural areas of northern Swaziland.

In the process of justifying the need for further homeopathy clinics, some of the questions that needed to be addressed were:

- Is homeopathy actually working?
- Are the patients actually showing improvement?
- Are the improvements noted just a result of taking the case and having someone listen?
- Are enough of the patients reporting improvement?
- Which remedies are being prescribed most frequently?
- How many of the patients are testing HIV positive?
- Can the individual symptoms be tracked to see if they have improved, changed or aggravated?
- Is it worth all the effort?

A straightforward data collecting system was set up to try to provide clear answers to some of these questions. The motivation for this was principally to see whether it would be worth applying for

large-scale funding for the project, and also to develop some means of monitoring other factors in the day-to-day running of a large-scale homeopathy programme. These factors include: remedy use for keeping track of the pharmacy; details of individual clinics; frequency of symptoms; and statistics on general patient population demographics.

Collecting the information

Since the majority of the project's clinics are held outdoors in rural areas, often in awkward conditions, cases are written, not computerised; and so a cover sheet was devised to include all the details on each patient that need to be entered on the database. The cover sheet has been designed in a user-friendly way so that the information is easily transferred. However, in a different clinical setting, data could be captured directly as the case is taken.

For each patient, the following overall details are recorded: name, age, sex, HIV status and clinic location. Then for each individual consultation, the following are noted: the date, the prescription, the remedy justification (symptoms or rubrics for the remedy), a symptom score (VAS – see info box on page 32), an evaluation of the treatment, and finally a patient and practitioner overall health score out of 10 (based on the Karnofsky scale in which 10 = completely healthy – see info box on page 38). These two scoring systems are the

basis for the analysis, providing both subjective and objective observations.

The details of each consultation are then entered on a weekly basis, and the patients can then be constantly and easily monitored and evaluated.

When deciding the evaluation scores, it was thought best to stay with existing scientific systems. The VAS Symptom score is on a scale of 0-5, where 5 = highest severity, 0 = symptom is cleared. This is evaluated by the practitioner, although it would also be possible to have both patient and practitioner score this.

Some case examples

The following cases illustrate how the patient scores change over time and indicate improvement or otherwise. Swaziland Homeopathy Project adopts the Layers method (Eizayaga model) for prescriptions considering miasmatic, constitutional, fundamental and lesion layers. This is because many of our cases are of advanced pathology and often complicated with drugs and are complex with multiple aetiologies.

This involves giving different remedies in sequence over a period of a week. The remedies are given to last for one month. We aim to see patients on a monthly basis and they will follow up until they feel well.

Case 1: Female, 27yrs, HIV negative

1st consultation 24.2.09

Presenting complaint: Backache, headache, dizziness, cough. Has a history of TB. December 08: Completed TB treatment with local hospital. Has four children. Sole wage earner, weaving baskets for Tintsaba crafts. Breastfeeding. Has a throbbing pain in backbone from top of spine to bottom which is worse at night. Suffers from sleeplessness due to this. Has headaches all the time which make her cry. It is a throbbing pain, mostly in forehead, morning till evening. Has had this for the past year. These headaches started with a cough accompanied by dizziness, heat, sweating and palpitations. The cough is a dry cough worse in cold weather with a pricking or sharp pain. No sputum.

Her child is ill and this worries her. He has a constant cough with



yellow phlegm. She has financial stresses as husband not working.

Burning itching eyes. Can't focus her vision. Has a sty in her right eye. Deaf in right ear. Heartburn in stomach when eating bitter things. She is breastfeeding, therefore no menstruation. Itching skin with sores on the thighs and buttocks. Watery discharge, worse in rainy weather.

Prescription

Tuberculinum bovinum 200: twice weekly: history of TB with recurrent symptoms of cough, dizziness, headache, sweating.

Natrum muriaticum 30: thrice weekly: dizziness with dry cough. Itching skin with watery blisters. Chronic headaches throbbing from morning till evening. Itching, burning eyes.

Patient score: 3/10.

Follow-up 12.5.09

Dizziness has now gone. Cough now expectorating, whitish watery. No smell. Pain on right side with cough.

Prescription: repeat remedies in higher potencies.

Tub bov 1M: twice weekly: history TB.

Barbara with a patient at an outreach clinic

Nat mur 200: thrice weekly: cough. Patient score: 5/10.

NB: Patient didn't return until ten months later. Says all cough etc was cleared.

Patient score: 8/10 on original symptoms.

Follow-up 9.3.10

Now HIV positive. Waiting to start on ART (Anti-retroviral therapy). CD4: 253 (see CD4 Count info box on page 39)

Presenting new symptoms: cough has developed. Chest pain with cough burning 'like a sore inside', yellow sputum. Loss of appetite. ++ thirsty, worse with cloudy weather. Has had this for one week now. Headache with cough in forehead and occiput, worse in heat and light.

Has new mental stresses; husband is in love with another woman. He now has a job but is supporting his lover and her three children, not her. She has four children to support. He has abandoned his family with no support. Feels very sad about this. Cries by herself, feels better for it. Is still breastfeeding.

Prescription

Arsenicum album 200: thrice

➤ weekly: burning pains with cough. Yellow sputum. ++ thirst. Financial worries. Poverty. Headache with cough. Loss of appetite.
Tub bov 30: twice weekly: repeat history of TB.
Patient score: 5/10.

Follow-up 13.4.10

Started ART (Anti-retroviral therapy); CD4 count 253.
 Presenting: Cough still remains. Burning pains in chest. Cough now dry. No sputum. Worse in evenings. The cough comes with a stomach ache with a desire to vomit; she ends up vomiting. Also a desire to sit up with cough. Still ++ thirst and loss of appetite. Throbbing headache on right side with cough. Worse in evening, worse in cold.

Still sadness over family problems. Can't see a change. 'Hopeless of future.' Won't confront her husband about the financial and other problems. She has no food. Is experiencing dizziness and numbness on right side of body with the ART.

Prescription: NB: case compromised by ART.

Phosphorus 200: thrice weekly: HIV. Cough with vomiting. Burning pains in chest with cough. Grief. ++ thirst. Worse when cold.
Carcinosin 30: twice weekly: HIV. Immune deficiency. Grief. Over-responsibility. Drug suppression.
Tissue salts 6x (all tissue salts in combination): four times weekly: immune boost.

Liver drainage support (Carduus marianus + Chelidonium + Hydrastis) 30x: four times weekly. ART side effects: burning, numbness, loss of appetite.
Patient score: 4/10.

Case 2: Female, 43yrs, HIV negative

1st consultation 24.2.09

Presenting complaint: Headaches. Backache. Ovarian tubes tied two yrs ago. Terrible headaches with throbbing in the temples for past six months. Itching eyes. With lachrymation. Basket weaver for Tintsaba crafts. The weaving makes it worse. She says the headaches and eye problems are connected.

Lower backache started two months ago. The pain is like a 'lightning pain', especially bad when getting up and with any movement that is quick, also with side-to-side movement. Has an irritating cough but no pain.

Has huge financial stress. Five children in school. Sole wage earner. Husband is ill. Feels very angry when can't provide for children. Her head hurts with this.

Has a slight cough with clear phlegm. No pain. Nothing serious. Can't sleep due to her problems of finances. Thinks a lot at night.

Prescription

Sulphur 30: twice weekly: terrible headaches with throbbing in temples and itching eyes. Fear of poverty. Constitutional.
Hypericum 1M: twice weekly:

Visual Analogue Scale (VAS):

This is commonly used in the medical field, especially oncology, to assess change in symptomology.

Symptom evaluation:

- 0: Completely better, no symptoms any more
 - 1: Noticeable, mild, irritating, occasional, part time, an inconvenience, 'It hurts a bit.'
 - 2: Most of the time, can't easily ignore, bit restrictive, 'It bothers me a lot.'
 - 3: Constant, all of the time, can't ignore, restricts activity at times, 'My pain is ...'
 - 4: Severe, all the time, intense, strong, incapacitating, overwhelming, 'I'm in pain.'
 - 5: Critical, intense, overwhelming, all consuming, 'Help me,' desperate.
- (http://en.wikipedia.org/wiki/Visual_analogue_scale)

backache with 'lightning pains'. Worse with motion.
Patient score: 4/10.

Follow-up 23.6.09

Presenting complaint: headaches have gone completely >>>. They had been there for six months. Cough now has an expectorant which is yellow in colour. Not painful. Has gone in two-week cycles since Oct last year. It started when caring for sick mother in hospital; she had a cough (pneumonia / TB). Had to sleep outside. It was cold. All else OK.

Prescription

Hepar sulph 200: thrice weekly: constant cough with yellow sputum. Worse with cold.
Tub 200: twice weekly: consistent cough. Past eight months. Family history cough.
Patient score: 8/10.

Follow-up 22.9.09

NB: New problem. All previous symptoms >>>
 Presenting complaint: Vision is bad, gets fogginess in front of eyes. They are itching. Worse strain with handicraft. All else clear.

Prescription

Nat mur 30: thrice weekly: eyes, vision, bad, worse from eyestrain. Eyes itching in morning.
Patient score: 8/10.

Follow-up 26.1.10

NB: New problem. All previous symptoms >>>
 Presenting complaint: right ankle pain. Worse after exertion i.e. long walking. Worse on further exertion i.e. any movement after resting.

Mpofu clinic



Prescription

Rhus toxicodendron 200: thrice weekly: ankle strain. Worse after exertion.

Patient score: 8/10.

Follow-up 9.3.10

Symptoms got better, then returned again after three months.

Presenting complaint: pain under heel. Throbbing. Worse in cold water, walking long distance. Now is starting to extend up the ankle.

Prescription

Rhus tox 30: thrice weekly: old sprain injury. Painful throbbing in heels.

Patient score 8/10.

Follow-up 13.4.10

Ankle now all >>>.

Presenting complaint: cough with headache, i.e. common cold. Cough is dry with pain 'like a tearing apart' in middle of chest. She has thirst and is worse in evening. Headache is worse in heat and heavy work. Also with thinking. She has financial stress with school fees. Young daughter also pregnant. She has throbbing on side of the head. Gets angry. Cries a lot with her troubles in evening, will then go to bed.

Prescription

Bryonia 200: thrice weekly: dry cough with sharp pains. Thirst and financial worries. Common cold with headache. Throbbing in temples.

Patient score: 8/10.

Case 3: Female, 55yrs. Not tested for HIV

First consultation 27.11.09

Presenting complaint: fibroids for the past 20yrs, untreated. Perimenopausal. Headaches with menses. Painful knees. She has 'lumps in the womb', experiences painful menstruation with heavy bleeding. Like 'labour pains', starts with a 'kicking sensation'. Loses energy a lot with this. She also has a headache with this menstruation. This has all been since the birth of her last child.

Husband died two yrs ago, after the birth of her last child. She worries a lot about looking after her children.

She has itching in her vagina with yellow discharge which smells rotten.



She has constipation and burning and throbbing in her feet. Worse in hot weather. Her arms ache with the handicraft work. She earns a living from handicraft. This is how she supports her family. Her knees ache from long sitting when doing handicraft. Better after stretching.

Prescription

Medorrhinum 200: twice weekly: fibroids, burning feet and rotten discharge.

Sepia 30: thrice weekly: fibroids with 'labour pain' with bleeding. NBWS birth of last child. Headaches with bleeding. Menopause starting.

Thyroidinum 30x: thrice weekly: organ support. Fibroid drainage.

Patients at Mgululu clinic

Hormonal balance.
Patient score: 5/10.

Follow-up 12.2.10

Presenting complaint: no more pain with menses >>>. Can feel the lumps reducing. Feet still burning. Knees >>>. Tiredness better but not gone. She has developed an itching rash with whitish spots that darken after scratching.

Prescription

Medorrhinum 30: twice weekly.
Sepia 30: thrice weekly.
Thyroidinum 30x: twice weekly.
Patient score: 7/10.

Follow-up 12.3.10

Presenting complaint: can still feel >

➤ fibroid reducing. Menstruation flow is much lighter. No pain either. Only has tiredness left in shoulders. Has started skipping menses i.e. menopause. Skin has now cleared >>>.

Prescription

Sepia 30: thrice weekly.
Medorrhinum 30: twice weekly.
Thyroidinum 30x: twice weekly.
Patient score: 8/10.

From these case studies, it can be seen that a simple score can easily demonstrate the changes in the case, and in this way homeopathic

treatment may be effectively evaluated.

Compiling the information

Two databases were set up: one for all the clinics and patients overall, and a separate database for a study of the HIV positive patients as part of ongoing research into the effect of an integrated approach in the treatment of HIV / AIDS.

Homeopaths are often criticised for not doing sufficient research and so-called clinical trials. However, it is possible to provide solid information from pragmatic observational studies that are conducted

Table 1: Patient status, gender and age groups

Swaziland Homeopathy Project – July 2011

Total	1799			
Gender				
Male:	253			
Female	1546			
HIV status	Total	Male	Female	Age distribution
Tested positive	320	33	287	Under 10 109
Tested negative	662	53	609	10 – 19 83
Not tested	392	68	324	20 – 29 239
Suspected positive	11	6	5	30 – 39 315
Unknown	413	92	321	40 – 49 358
Patients on ART	155	19	136	50 – 59 292
				60 – 69 216
				70 – 79 101
				Over 79 41

Table 2: Overall changes in evaluations

Swaziland Homeopathy Project – July 2011

Change between consultations, for first four consultations

Patient			Practitioner		
All follow-ups:	1514		All follow-ups:	1514	
Improved	940	62%	Improved	962	64%
No change	373	25%	No change	368	24%
Aggravated *	200	13%	Aggravated	184	12%
Follow-ups – HIV+	319		Follow-ups – HIV+	319	
Improved	195	61%	Improved	208	65%
No change	75	24%	No change	68	21%
Aggravated	49	15%	Aggravated	43	13%
Follow-ups – patients on ART	182		Follow-ups – patients on ART	182	
Improved	111	61%	Improved	118	65%
No change	41	23%	No change	38	21%
Aggravated	30	16%	Aggravated	26	14%
Follow-ups – patients not on ARVS	145		Follow-ups – patients not on ARVS	145	
Improved	88	61%	Improved:	94	65%
No change	36	25%	No change	32	22%
Aggravated	21	14%	Aggravated	19	13%

* 'Aggravated' does not mean a remedy aggravation; it reflects the patient's current overall health. It includes new symptoms as well as changes in previously observed symptoms.

Table 3: Example of individual clinic statistics

Swaziland Homeopathy Project – July 2011

Summary by location			
Change between consultations, for first four consultations			
Endzingeni			
Number of patients:	83	HIV status:	
Number of patients with follow-ups:	45	Not tested	17
		Tested negative	28
		Tested positive	21
Progress at each follow up:		Unknown	17
Patient	Practitioner		
Aggravated	12%	Aggravated	9%
No change	24%	No change	24%
Improved	64%	Improved	67%
Vusweni			
Number of patients	48	HIV status:	
Number of patients with follow-ups	30	Not tested	6
		Tested negative	25
		Tested positive	9
Progress at each follow up:		Unknown	8
Patient	Practitioner		
Aggravated	16%	Aggravated	15%
No change:	17%	No change	19%
Improved	67%	Improved	66%

Table 4: Example from HIV database

Swaziland Homeopathy Project – July 2011

Most frequently used remedies
 (Remedies prescribed at least 10 times)

Remedy	No. of times
<i>Tuberculinum</i>	32
<i>Carcinosin</i>	30
<i>Natrum muriaticum</i>	22
<i>Sulphur</i>	19
<i>Arsenicum album</i>	18
<i>Phosphorus</i>	15
<i>Medhorrhinum</i>	15
<i>Rhus toxicodendron</i>	13
<i>Pulsatilla</i>	11
<i>Bryonia</i>	10

on an ongoing basis. This would serve as concrete evidence for the efficacy of homeopathy. Individual cases as well as large groups of patients may be practically analysed.

Monthly reports and analyses

1. Patient statistics and demographics

This information is important for general statistical purposes, and gives an idea of the overall status of the patients seen at clinics (see Table 1). This is very useful data in general. Due to stigma over HIV / AIDS in Swaziland, many people

Table 5: Example from overall database
Swaziland Homeopathy Project – July 2011

Analysis of changes in symptoms severity

Total symptom follow-ups			3419
Improved	214	63%	
No change	799	23%	
Aggravated	477	14%	
Symptom follow-ups – HIV+			837
Improved	507	61%	
No change	218	26%	
Aggravated	112	13%	
Symptom follow-ups – patients on ART			508
Improved	303	60%	
No change	133	26%	
Aggravated	72	14%	
Symptom follow-ups – patients not on ART			350
Improved	215	61%	
No change	92	26%	
Aggravated	43	12%	

Note: If symptoms have not been scored within a six-month period, they are not included in this analysis.

Table 6: Example: HIV database (300 patients)
Swaziland Homeopathy Project – July 2011

Comparison of symptom changes by practitioner

Practitioner	Improved		No change		Aggravated		Total
Practitioner A	206	65%	69	22%	44	14%	319
Practitioner B	184	63%	75	26%	34	12%	293
Practitioner C	11	50%	6	27%	5	23%	22
Practitioner D	11	46%	13	54%	0	0%	24
Practitioner E	3	38%	3	38%	2	25%	8
Practitioner F	3	100%	0	0%	0	0%	3
Practitioner G	3	75%	1	25%	0	0%	4
Practitioner H	2	100%	0	0%	0	0%	2
Practitioner I	1	100%	0	0%	0	0%	1
Practitioner J	1	25%	3	75%	0	0%	4

Swaziland Homeopathy Project – July 2011
Overall database (1,800 patients)

Comparison of symptom changes by practitioner

Practitioner	Improved		No change		Aggravated		Total
Practitioner A	1033	62%	374	23%	247	15%	1654
Practitioner B	824	62%	314	24%	185	14%	1323
Practitioner C	97	59%	51	31%	16	10%	164
Practitioner D	63	64%	22	22%	13	13%	98
Practitioner E	31	84%	6	16%	0	0%	37
Practitioner F	24	62%	11	28%	4	10%	39
Practitioner G	23	61%	8	21%	7	18%	38
Practitioner H	15	88%	2	12%	0	0%	17
Practitioner I	12	75%	1	6%	3	19%	16
Practitioner J	11	61%	6	33%	1	6%	18
Practitioner K	10	77%	2	15%	1	8%	13

are not tested and are unwilling to do so. The last census conducted in this country was in 2007 and most of the statistics are projections made on the results of this census. Any accurate information is therefore very useful in this regard.

2. Overall patient evaluations

This report gives an overview of all the patients who have returned for follow-up treatments along with the patient and practitioner scores (see Table 2). From this, a steady average overall improvement of 60-65% in patient scores can be observed. This applies to both the patient and practitioner evaluations. These scores are for the previous six-month period of follow-ups.

3. Individual clinic statistics

This report allows each clinic to be individually tracked and checked to see how many patients are following up and how this can be improved if necessary (see Table 3). This is particularly useful for preparing feedback to the women's handicraft groups that partner the project. It also enables monitoring of the success of the individual clinics. Each of these clinic locations is visited once a month.

4. Analysis of remedy use

The remedy / prescription analysis provides interesting information regarding the nature of the treatment, and in the case of the HIV database, some insight into the 'genus epidemicus' of the HIV / AIDS pandemic in Swaziland (see Table 4).

As can be seen, the most commonly used prescriptions are tubercular remedies with the exception of *Rhus tox*. The presence of *Rhus tox* is probably due to the high prevalence of herpes zoster in HIV positive patients.

5. Summary of symptom changes

This report gives an overview of the total symptoms that were scored at the follow-up treatments, and gives an idea of whether the symptoms are improving as a result of treatment within a period of six months (see Table 5). There is also an additional symptom report which scores the frequency of symptoms; for example, it can be seen from this report that grief, cough and headache are the most common symptoms treated. This ties in with the tubercular nature of the chronic disease most commonly encountered.

➤ **6. Practitioner symptom analysis**

When the symptoms are scored, they are linked to the practitioner who prescribed at that consultation. This enables the database to track the number of symptoms improved, aggravated or unchanged as per prescription. In this way the effectiveness of the practitioner can be measured (see Table 6).

The scores only really start to have significance at a higher number of symptoms, but it can be seen that practitioners A and B (in both tables) have on average a score of about 60-65% improved symptoms on the VAS score analysis. This is similar to the overall patient and practitioner Karnofsky score analysis, which is also in this range. So with these two scores from different scales one may fairly accurately say that homeopathy has brought about a 60-65% improvement in the health of this sample of 1,800 patients. This is evident in both HIV and overall databases (see Table 6).

The above reports are compiled on a monthly basis. In addition to this, it is possible to carry out further statistical analysis of the database results. The patients on the HIV database were statistically analysed using the Student's *t*-test (see info box on page 39).

ART study background

In Swaziland, patients are only eligible for free anti-retroviral treatment (ART) if their CD4 count is below 350. Many patients are therefore not yet eligible for ART. Those that are on ART and suffering from side effects such as peripheral neuropathy, nausea, vertigo and headache, can get a great deal of relief from homeopathic treatment. Homeopathy does not interfere with ART and the patients are more able to adhere to their treatment regime.

It should be noted that the project is not claiming to cure HIV / AIDS and recommends that patients test to determine their status. The patients who are not yet on ART are even more in need of assistance, and homeopathy is able to help in maintaining the health of these patients by boosting their immunity as well as facilitating the recovery from opportunistic infections.

From the database information, a statistical analysis of practitioner and patient scores shows the following (see Table 7).

Table 7: Analysis of patient and practitioner overall evaluations – July 2011

Swaziland Homeopathy Project ART Study			
No treatment figures based on all first consultation scores i.e. pre-treatment			
Treatment figures based on last consultation for each patient receiving treatment where they have followed up			
Comparison of patient and practitioner evaluations for patients receiving homeopathic treatment compared with no treatment			
Patient scores HIV+			
	ART		
	No. of patients	Average score	std dev
No treatment	146	5.58	0.11
Homeopathic treatment	71	7.28	0.18
Difference		1.70	1.70
		significant at 99.9% confidence levels	
	t *		71.89
	approx df *		48
	highly significant: t for 50 df		
	0.001 probability = 3.496		
	99.9% confidence interval		1.70
	+/-		0.09
	range from		1.61
	to		1.80
Practitioner scores HIV+			
	ART		
	No. of patients	Average score	std dev
No treatment	146	5.38	0.10
Homeopathic treatment	71	7.18	0.19
Difference		1.80	1.80
		significant at 99.9% confidence levels	
	t		76.94
	approx df		45
	highly significant: t for 40 df		
	0.001 probability = 3.551		
	99.9% confidence interval	1.80	
	+/-		0.09
	range from		1.71
	to		1.90
Patient scores HIV+			
	No treatment		
	No. of patients	Average score	std dev
ART	146	5.58	0.11
No ART	154	6.17	0.43
Difference		0.59	0.59
		significant at 99.9% confidence levels	
	t		16.59
	approx df		88
	highly significant: t for 80 df		
	0.001 probability = 3.416		
	99.9% confidence interval	0.59	
	+/-		0.12
	range from		0.47
	to		0.71
Practitioner scores HIV+			
	No treatment		
	No. of patients	Average Score	std dev
ART	146	5.38	0.10
No ART	154	5.58	0.12
Difference		0.21	0.17
		significant at 99.9% confidence levels	
	t		16.51
	approx df		218
	highly significant: t for 120 df		
	0.001 probability = 3.373		
	99.9% confidence interval	0.21	
	+/-		0.04
	range from		0.17
	to		0.25

* t = t distribution df = degrees of freedom
All comparisons showed highly significant differences, using the Student's *t* test for statistical analysis.

Interpretation: Comparisons between no treatment and treatment showed a significantly better evaluation of health irrespective of whether the patients were on ART and whether the scoring was by the patient or the practitioner.

Based on both patient and practitioner evaluations, prior to homeopathic treatment, patients not on ART scored a higher overall evaluation of health.

This study provides empirical evidence that as a result of homeopathic treatment there is a significant positive measure of change in overall health scores

No ART		
No. of patients	Average score	std dev
154	6.17	0.43
78	7.10	0.20
	0.93	0.93
	significant at 99.9% confidence levels	
t		22.60
approx df		444
highly significant: t for 120 df		
0.001 probability = 0 3.373		
99.9% confidence interval		0.93
+/-		0.16
range from		0.77
to		1.09
No ART		
No. of patients	Average score	std dev
154	5.58	0.12
78	8.19	1.15
	2.61	2.61
	significant at 99.9% confidence levels	
t		19.95
approx df		39
highly significant: t for 40 df		
0.001 probability = 3.551		
99.9% confidence interval		2.61
+/-		0.51
range from		2.09
to		3.12
Treatment		
No. of patients	Average Score	std dev
71	7.28	0.18
78	7.10	0.20
	0.18	0.00
	significant at 99.9% confidence levels	
t		5.75
approx df		147
highly significant: t for 120 df		
0.001 probability = 3.373		
99.9% confidence interval		0.18
+/-		0.08
range from		0.10
to		0.26
Treatment		
No. of patients	Average Score	std dev
71	7.18	0.19
78	8.19	1.15
	1.01	0.65
	significant at 99.9% confidence levels	
t		7.65
approx df		40
highly significant: t for 40 df		
0.001 probability = 3.551		
99.9% confidence interval		1.01
+/-		0.36
range from		0.65
to		1.37

Comparison between patients on ART and not ART showed an interesting difference between patient and practitioner scoring, where the patient scores show that patients on ART evaluated their health at a higher level than the evaluations by the practitioners, to the extent that they scored higher than patients not on ART when looking at patient scores in contrast to the reverse when looking at practitioner scores.

What can be inferred from these statistics?

It is probable that patients on ART were experiencing some drug side effects and therefore scored lower at the start, prior to the homeopathic treatment. However, once these patients had received homeopathy, those on ART scored higher overall – higher even than those not yet on ART. It may be that after the homeopathic treatment, the side effects were alleviated and the patients generally felt better. This analysis was from a sample of about 300 patients and gives a good indication that there is a significant difference in patients getting homeopathic treatment as well as the standard ART.

This study provides empirical evidence that as a result of homeopathic treatment there is a significant positive measure of change in overall health scores.

Conclusions

As a result of maintaining simple and consistent records, the database can be used to provide answers at some level to all the original questions that were posed.

Is homeopathy actually working?

Yes: 60-65% of patients reported improved overall health scores.

Are the patients actually showing improvement?

Karnofsky performance status scale score:

The Karnofsky score runs from 100 to 0, where 100 is 'perfect' health and 0 is death. Although the score generally uses intervals of 10, a practitioner may choose decimals if he or she feels a patient's situation holds somewhere between two marks. It is named after Dr David A Karnofsky, who described the scale with Dr Joseph H Burchenal in 1949.

Karnofsky score is a subjective measure of how well the patient is doing.

- 100 Normal, no complaints or evidence of disease
- 90 Able to perform normal activity; minor signs and symptoms of disease
- 80 Able to perform normal activity with effort; some signs and symptoms of disease
- 70 Cares for self, unable to perform normal activity or to do active work
- 60 Requires occasional assistance but is able to care for most of own needs
- 50 Requires considerable assistance and frequent medical care
- 40 Requires special care and assistance; disabled
- 30 Hospitalisation indicated, although death not imminent; severely disabled
- 20 Hospitalisation necessary; active supportive treatment required, very sick
- 10 Fatal processes progressing rapidly; dying state
- 0 Dead.

(http://en.wikipedia.org/wiki/Performance_status)

Our modified version, 'Patient score' in the cases, is

Modified Karnofsky:

- 10 Normal, no complaints or evidence of disease (*I am well*)
- 9 Able to perform normal activity; minor signs and symptoms of disease (*I feel the problem only a little*)
- 8 Some signs and symptoms of disease (*My problem is still there sometimes but not very bad*)
- 7 Able to perform normal activity with effort; signs and symptoms of disease (*I can work but my problem is always there*)
- 6 Cares for self but difficulty performing normal activity or doing active work (*The problem makes it difficult for me to work*)
- 5 Requires occasional assistance but is able to care for most of own needs (*I can manage but the problem makes me weak and prevents me from doing the things I need to do*)
- 4 Partially disabled; able to walk only with assistance (*I am weak and need help to walk*)
- 3 Severely disabled although death not imminent (*I am very, very weak*)
- 2 Hospitalisation necessary; active supportive treatment required, very sick (*I cannot get up or walk*)
- 1 Fatal processes progressing rapidly; dying state (*I am very sick and weak, cannot eat or get up*)
- 0 Death.

CPD with Swaziland Homeopathy Project:

Obtain a practical knowledge of homeopathy while making a difference to the lives of others

Volunteering for the Swaziland Homeopathy Project offers homeopaths a unique opportunity to obtain clinical experience treating patients in impoverished rural communities of Africa. Started in 2008, the project aims to provide free homeopathic treatment to those in need, and now offers services at 19 locations in central and northern Swaziland.



We are offering a **two-week volunteering/holiday opportunity for undergraduate and graduate students seeking CPD** in the field of homeopathy, as well as practising homeopaths who look to obtain knowledge of treating patients in indigenous rural communities. Participants will get a unique chance to experience African culture, visit historical sites, and enjoy the beautiful natural scenery of Swaziland.

During the two weeks, students will be able to observe the use of homeopathy on a large scale and get first-hand experience treating patients in underprivileged communities of Africa. Participants will gain practical clinical experience of approximately **50 cases**, and learn about treatment of a wide range of chronic disease.

Volunteers will acquire insight into the:

- Miasmatic approach to the treatment of chronic disease
- Monitoring and evaluation of the effectiveness of homeopathic treatment
- Successful management of homeopathic clinics in developing world
- Integrating homeopathy with existing allopathic treatments for chronic disease

The search for the genus epidemicus of chronic diseases such as HIV/AIDS and tuberculosis.

In addition to making a difference to the lives of Swazis living in impoverished conditions, students will get to experience local culture and will be provided with a choice of a variety of destinations in Swaziland for a weekend trip. Additional weekend excursions to Mozambique and South Africa's Kruger National Park are available for an extra charge.

Who can apply? Undergraduate and graduate students seeking CPD in homeopathy, as well as practising homeopaths.

Accommodation: Students will be accommodated at a comfortable guest house in the beautiful surroundings of Pine Valley, located not far from the capital Mbabane, which offers access to local shops and restaurants. There is electricity, hot water and internet is available at local internet cafes.

Cost: The price for the two-week volunteering/holiday is **£1000** per person. This includes accommodation, meals, transportation to clinics, and a weekend trip to a selected location in Swaziland. Students must pay for their airfare and miscellaneous expenses.

100% of the proceeds go towards sustaining the clinics of this homeopathic charity



For bookings, itinerary and other information contact:

bjb@africaonline.co.sz

For additional information please visit our website:

www.kbraunweb.com/homeopathyproject

For information on Swaziland:

www.sntc.org.sz

www.biggameparks.org

Yes: 60-65% of symptoms showed improvement.

Are the improvements noted just a result of taking the case and having someone listen?

This is difficult to determine from the data. From the case studies, it can be seen that many patients suffer from poverty and social problems, and have no access to counselling or other social services. Spending time listening to the patient is an important part of the healing process. For example, in one instance, on being asked to give a score a patient commented:

When I came in I was definitely 5, but now that I have told you my story I am 10 out of 10(!), when the remedies had not even been prescribed yet.

However, infants and small children who were not directly questioned showed similar improvements in symptoms and overall health.

Are enough of the patients reporting improvement?

The improvement rates are high enough to justify the continuation of free clinics.

Which remedies are being prescribed most frequently?

Mainly tubercular remedies.

CD4 Count

People infected with HIV lose helper T lymphocytes (CD4+ cells) in three phases over months or years. A healthy person has a CD4+ lymphocyte count of roughly 800 to 1300 cells per microlitre of blood.

(The Merck Manual of Medical Information (1999, Home Edition) 187, 1012 – 1013)

How many of the patients have tested HIV positive?

18% of patients have been tested HIV positive; however, 45% of patients have not been tested at all.

Can the individual symptoms be tracked to see if they have improved, changed or aggravated?

Yes, the database makes this easy.

Is it worth all the effort?

The practitioners have found that the process of collecting data has improved their overall practice, because it provides a clear overview of the day-to-day work of the project.

Barbara Braum can be contacted at bjb@africaonline.co.sz.

The improvement rates are high enough to justify the continuation of free clinics

The project is not claiming to cure HIV / AIDS

Student's *t* test

The Student's *t* test is a standard statistical analysis:

$T = t$ distribution
df = degrees of freedom

A *t* test is any statistical hypothesis test in which the test statistic follows a Student's *t* distribution, if the null hypothesis is supported. It is most commonly applied when the test statistic would follow a normal distribution if the value of a scaling term in the test statistic were known. When the scaling term is unknown and is replaced by an estimate based on the data, the test statistic (under certain conditions) follows a Student's *t* distribution.

Calculations

Explicit expressions that can be used to carry out various *t* tests are given below. In each case, the formula for a test statistic that either exactly follows or closely approximates a *t* distribution under the null hypothesis is given. Also, the appropriate degrees of freedom are given in each case. Each of these statistics can be used to carry out either a one-tailed test or a two-tailed test.

Once a *t* value is determined, a *p* value can be found using a table of values from Student's *t* distribution. If the calculated *p* value is below the threshold chosen for statistical significance (usually the 0.10, the 0.05, or 0.01 level), then the null hypothesis is rejected in favour of the alternative hypothesis.

(http://en.wikipedia.org/wiki/Student's_t-test)