

A Convergence of Evidence:

Flower Essence Therapy in the Treatment of Major Depression

an analysis by Dr. Jeffrey R. Cram,

with data from Dr. Pedro Sastriques Silva, Lic. Elvira Haydée Ramos González, Dr. María de los Ángeles Fernández de la Llera, and Dr. Sol Inés Tena Rodríguez

The convergence of findings from these five outcome studies strongly supports the concept that flower essences may be used adjunctively to facilitate the resolution of mild to moderate depression.

Abstract

This article presents the findings of a series of studies conducted to determine the clinical efficacy of flower essences on the treatment of mild to moderate depression. Funding for the study was provided by the Flower Essence Society. Therapists participating in the study did so on a volunteer basis.

Five independent clinical outcome studies are presented, each lending evidence towards understanding the clinical effects of flower essences on the treatment of depression. The results of these studies were measured using the Beck Depression Inventory (BDI) and the Hamilton Depression Scale (HAM-D). A time series analysis of the data was conducted using an ANOVA (analysis of variance) for repeated measures. Four of the studies were conducted by therapists in Cuba under the auspices of the Cuban Ministry of Public Health. The first of these studies examined over 100 patients, of which approximately half completed therapy. They were tracked over a period of five months, with an outcome indicating a significant reduction in depressive symptoms. The second and third studies utilized 20 patient/subjects and examined the effects of flower essence therapy over a 2-month and 3-month period of time. Again, significant drops

in depression scores were noted during the first month, with further decreases during the second and third months. Both studies show reductions of the BDI total score of 76-77%. The fourth study utilized 24 cases over a 3-month period of time. Significant decreases in depressions were noted for the first two months, with this stabilizing at a 60 to 80% reduction during the third month.

The fifth study entailed a multi-site clinical trial conducted in the United States. It has been published elsewhere (Cram, 2001b). This study of 12 depressed subjects included a one-month baseline followed by 3 months of treatment that entailed usual care along with flower essence therapy. The findings indicated a stable baseline, followed by a 50% reduction in depression scores when flower essence therapy was introduced. This clinical change was maintained over a period of 3 months.

While none of these studies utilized a randomized control group, the convergence of findings from these five outcome studies strongly supports the concept that flower essences may be used adjunctively to facilitate the resolution of mild to moderate depression.

Depression and its Treatment

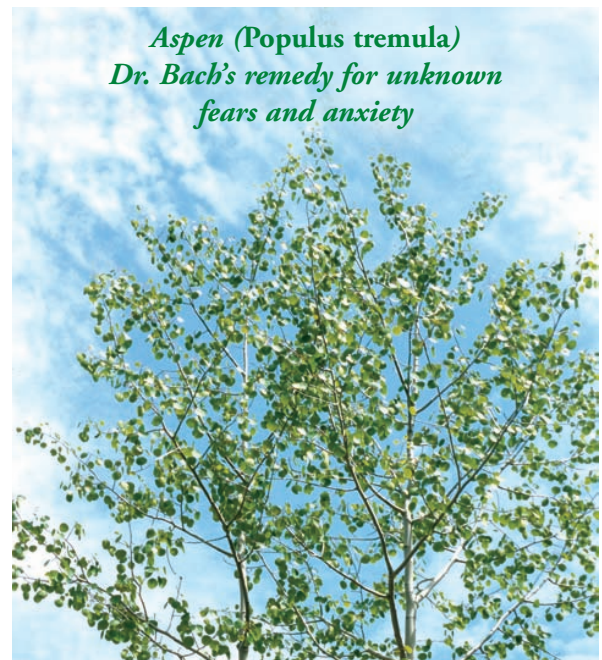
It is known that the lifetime risk for major depressive disorder is 7 to 12% for men and 20 to 25% for women (Rush, 1993a). While the range of depression may vary from mild to severe, in general, depression may be said to decrease the overall quality and productivity of life. For example, clinical samples of patients with major depressive disorder provide evidence of severe impairment in interpersonal and occupational functioning, including loss of work time (Wells et al., 1989). Patients with major depressive disorder have more physical illnesses than do other patients seen in primary care settings (Coulehan et al., 1990). And, health care utilization is increased in persons in the community with major depressive disorder compared to other patients in the general medical setting (Regier et al., 1988).

Once identified, depression can often be treated successfully with medication, psychotherapy, or a combination of both (Rush et al., 1993b). Not all patients respond to the same therapy, but a patient who fails to respond to the first treatment attempted is highly likely to respond to a different treatment. Formal treatments for major depressive disorder fall into six broad domains: medication, psychotherapy, the combination of medication and psychotherapy, electroconvulsive therapy (ECT), light therapy, and alternative therapies such as

herbs and homeopathy. Each domain has benefits and risks, which must be weighed carefully in selecting the optimal treatment for a given patient.

The efficacy of the treatment of depression has been studied extensively. Rush (1993b) conducted an exhaustive review of the literature and presents the complexities of trying to monitor treatment outcomes, along with “meta-analyses” of several forms of therapy. In one such meta-analysis, 24 randomized control trials across 10 different anti-depressant medications indicated that 57.8% of the patients responded to anti-depressant medications, compared to 35.6% responding to placebos.

Today, more and more individuals are seeking non-pharmacological (alternative therapy) solutions to physical and mental disorders. Eisenberg et al. (1993), conducted a national survey indicating that one in three respondents used at least one alternative therapy in the last year, and that a third of those saw their alternative provider an average of 19 times. Similar international studies estimate that from 70 to 90% of healthcare is rendered by alternative practitioners (Micozzi, 1996). The nature of the studies presented in this article focuses upon the use of flower essence therapy, one alternative therapy, in the treatment of mild to moderate depression.



Suffering is an opportunity to bring to awareness spiritual and emotional conflicts that need to be resolved so that one can fulfill his or her full potential and destiny in life.

Flower Essence Therapy: Treating the Individual, Not the Disease

The therapeutic use of flower essence therapy in the treatment of depression and other psychologically based disorders is not new. Flower essence therapy was introduced by the English physician, Dr. Edward Bach, in the 1930s (Bach, 1931; Weeks, 1940; Barnard, 1994). Bach observed the effects of worry, anxiety, fear, confusion, indecision, depression, despair, jealousy, resentment, and the like on the health of his patients. The 38 flower remedies that he developed each address specific emotional states. Yet, Dr. Bach did not conceive of flower essence therapy as merely a means to remove emotional pain. In his book *Heal Thyself*, Dr. Bach (1931) writes that suffering is a means by which one can change. Suffering is an opportunity to bring to awareness spiritual and emotional conflicts that need to be resolved so that one can fulfill his or her full potential and destiny in life.

It is more important to know what sort of person has a disease than to know what sort of disease a person has. — Hippocrates

The practitioner considers the emotional, mental, physical, and spiritual aspects (or bodies) of the individual. There is not one standard flower essence or flower essence combination that is ideally suited for treating depression. Instead, the practitioner must treat the individual, rather than the disease, selecting the particular flower essence combination that will empower the individual to change. The essences are seen as catalysts for self-awareness and change. To be successful, rather than directly treating the depression, the essence combination for the individual must awaken the energetic qualities in the individual that are out of balance or suppressed.

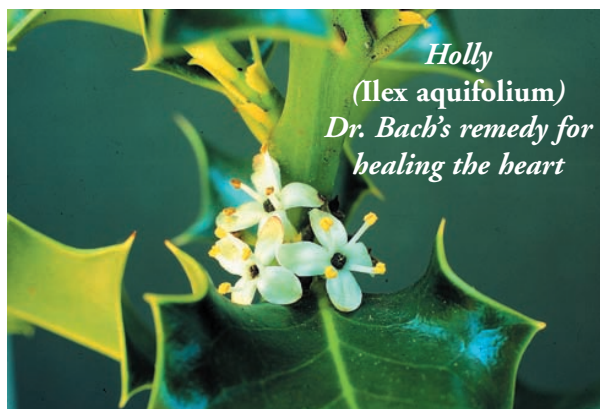
Prior Clinical Research in Flower Essence Therapy

Most of the clinical research on flower essences has entailed anecdotal case reports. There has been very little formal research on the topic. In conducting a deep review of the literature, it appears that only three formal studies have been conducted on the therapeutic effects of flower essences. Campanini (1997) evaluated patients before and after a flower essence treatment program of three or four months for the treatment of symptoms of anxiety, stress, and depression. Improvement was noted in 89% of patients, especially those with anxiety symptoms. An analysis of the patients' initial trust or skepticism about the treatment did not show any influence on the outcome of the treatment. Cram (2001a) utilized a randomized placebo control design to determine the influence of Bach's "emergency combination" (Five-Flower Formula) on a psychological (Paced Serial Arithmetic Task) stress response. From this study, the flower essences were noted to significantly attenuate physiological arousal compared to the placebo control. Cram (2001a) also explored the influence of the Five-Flower Formula versus the Yarrow Special Formula (currently available as Yarrow Environmental Solution) against a placebo control group on a physically stimulated (high-intensity light) stress response on QEEG and muscle tension at the sites of the chakras. From this study, it was observed that only the placebo group showed increased activation of beta activity in the frontal lobes along with increased muscular activation in the mid-back (heart) area during intense photic stimulation. Neither flower essence combination group evidenced these two stress responses. Lastly, there have been two dissertations involving flower essences (Ruhle, 1994; Weisglas, 1979), one assessing the impact of flower essences on pregnancy and the other looking at personal growth.

Flower Essence Therapy in Cuba

The emergence of flower essence therapy and the associated research in Cuba is particularly significant. With the fall of the Soviet Union and consequent ending of economic support, and the longstanding economic embargo by the United States, by 1995, Cuba was faced with an unstable economy, along with a scarcity of medical supplies and pharmaceuticals. Because of the perceived efficacy and growing worldwide interest in holistic medicine, the Cuban government mandated the establishment and integration of natural and traditional medicine into their conventional medicine national health system (MINSAP, 1996). Miyar (2002) has provided a complete description of the revolution of political and healthcare policy that led to educating healthcare practitioners in the use of flower essences as the mainline treatment of mental and emotional disorders. (See page 74 for an article by Dr. Miyar on flower essence therapy in Cuba.) The systematic evaluation of the clinical effects of flower essence therapy in the treatment of depression in Cuba was stimulated by the previous research summarized in the preliminary findings of Cram (2001b).

In this article, a series of clinical outcome studies is presented that examine the clinical efficacy of flower essence therapy as an adjunctive in the treatment of mild to moderate severity in major depression. Four new, and one prior (Cram, 2001b), clinical outcome studies are presented in this article.



A Time-Series Design Using the Beck and Hamilton Scales

The experimental design for all five studies is best described as a “quasi-experimental” time series design (Campbell & Stanley, 1963). Such a design was used extensively in 19th century experimentation for the physical and biological sciences. Its weakness, of course, is the lack of a randomized control group. However, in the behavioral sciences, simple outcome studies provide a stronger basis of information compared to single case reports. In addition, the “within subject” designs have commonly been used in initial clinical outcome studies. The statistical analysis used in all four studies consisted of a repeated measures design to account for the fact that the data set is related.

In all of the studies, the impact of the flower essences on depression was measured on two objective standard depression inventories, the Beck Depression Inventory (BDI) and the Hamilton Depression Scale (HAM-D) (Beck, 1961; Hamilton, 1968). The former is a self assessment by the patient, while the latter is a structured clinical assessment by the therapist or physician.



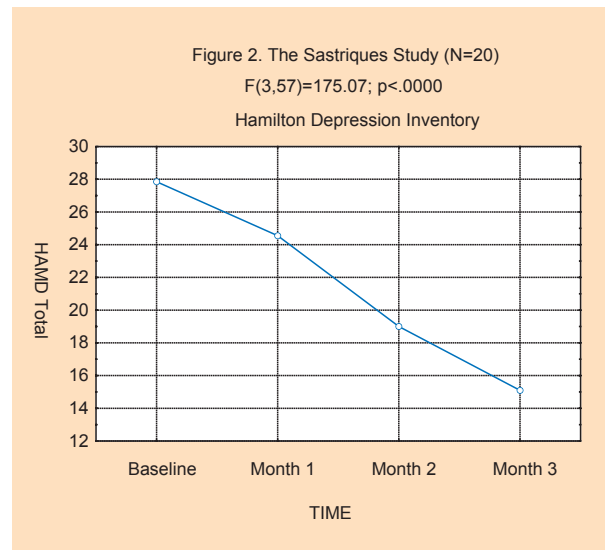
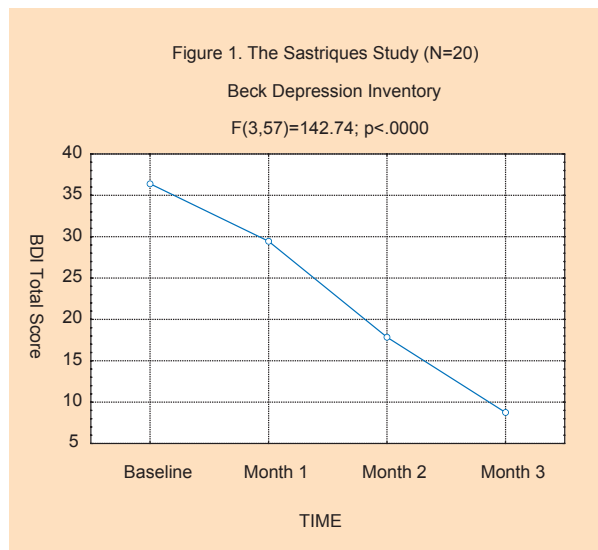
Study 1: The Sastriques Study: At the Outpatient Clinic of the Psychiatric Hospital of Havana

The first study was completed by Dr. Pedro Sastriques Silva. (See profile on page 83). The study took place at the outpatient clinic of the Center for Specialized Treatments (DTE) at the Psychiatric Hospital of Havana, Cuba. Dr. Sastriques and three other doctors treat approximately 60 patients per week at the clinic. Twenty-three patients were selected who did not have previous treatment with flower essences, and who were suffering from depression. The method of selection was a technique of kinesiological testing by arm reflex, developed by Dr. Sastriques and his wife, Dr. Xonia Lopez. The method is known as EEI (Evaluación Energética Integrativa — Integrative Energetic Evaluation.) (Sastriques 2000, 2004).

All 23 patients completed three months of flower essence therapy, most with four monthly Beck and Hamilton tests. The patients included 13 females and 10 males, ranging in age from 22

to 64, with an average age of 43. Of the 23 subjects, BDI and HAM-D data were complete for all four months for 20 subjects. There was an average of 5.2 essences selected in each session, and a total of 113 unique essences were used in the study. The twenty most frequently used essences were **Agrimony, Scleranthus, Saguaro, Crab Apple, Olive, Oak, Borage, Mimulus, Impatiens, Holly, Gentian, Chestnut Bud, White Chestnut, Mountain Pride, Chicory, Rock Water, Self-Heal, Wild Rose, Aspen** and **Pomegranate**.

The effects of flower essence therapy on both the Beck Depression Inventory ($F(3,57)=142.74$; $p<.0000$) and Hamilton Depression Scale ($F(3,57)=175.07$; $p<.0000$) were highly significant. Figures 1 & 2 show the significant declines in both the BDI and HAM-D scores. The BDI scores indicate that the group started out in the moderately depressed range at baseline, and ended in the “normal” range by the third month of flower essence therapy. The HAM-D scores reflect a moderate level of depression at baseline, shifting to mild levels of depression by the end of flower essence therapy.



Study 2: The Ramos Study: An Active Practice of a Cuban Psychologist

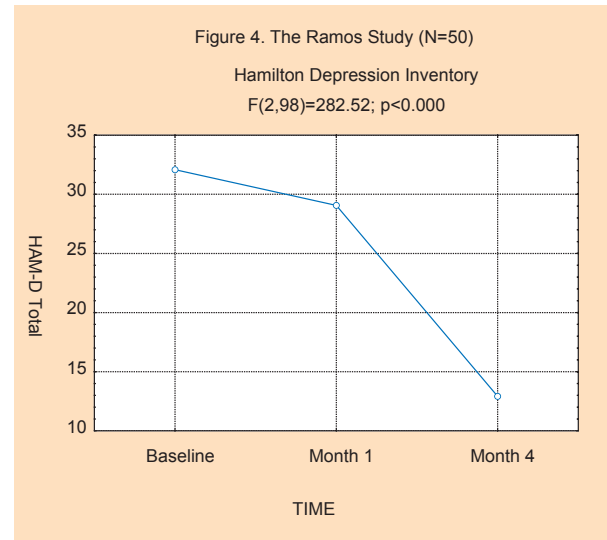
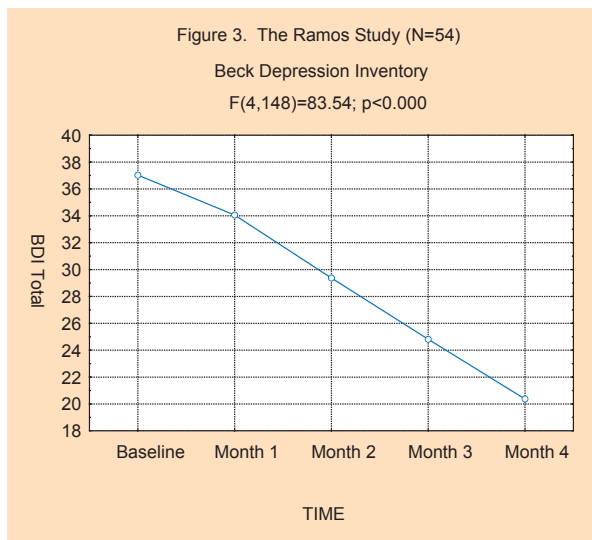
This study was conducted in Cuba by Lic. Elvira Haydée Ramos González, a psychologist at the Psychiatry Department of the Hospital and Medical Institute “Calixto García,” in Havana, Cuba. (See profile on page 85.)

One hundred and nine patients were offered flower essence therapy for their depression. Fifty-four patients, representing 49.5% of the sample, completed therapy, 19 patients were still undergoing therapy at last report. Thirty-five patients abandoned therapy, and one patient died. The overall drop-out rate was 33%. The original sample consisted of 79 females and 30 males. The average age of the population was 47.4, ranging from 17 to 81 years. Patients were selected according to the criteria of the study: having had no previous flower essence therapy, reporting that they were depressed, and a willingness to volunteer for the study. Of the 54 completing the study, Hamilton Depression Scores were completed less often, with baseline and first month data available on all subjects with only 50 HAM-D assessments being conducted at the 5th month of therapy.

Individual prescribing procedures were utilized, based on a clinical interview with the patient. The

54 patients were seen monthly over the course of their therapy, for a total of 5 visits. An average of 3.2 flower essences were used in each session, out of a total of 98 unique essences. The twenty most frequently used essences were **Mariposa Lily, Dandelion, Beech, Sunflower, Lavender, Garlic, Holly, Manzanita, Chamomile, Self-Heal, Chicory, Saint John’s Wort, Snapdragon, Angelica, Crab Apple, Saguaro, Yerba Santa, Forget-Me-Not, Willow, and California Wild Rose.**

The results of the Ramos study are presented in Figures 3 and 4 below. As can be seen in the BDI scores, there is a highly significant change in BDI scores ($F(4,148)=83.54; p<0.000$). Here, the baseline for the depressed patients began in the high end of the severely depressed range, falling nearly 50% and into the bottom end of the moderately depressed range at the end of 4 months of flower essence therapy. Post hoc analysis, (Tukey’s HSD, Tukey, 1992) shows a significant decrease in depression scores for each month compared to the prior month. The HAM-D ratings by the prescribing physician also show severe levels of depression at baseline, with a highly significant decrease in depression ($F(2,98)=282.52; p<0.000$) being observed over the course of the 4 months. Here, there is a 66% decrease in the HAM-D scores from severely depressed at baseline to mildly depressed at month 4. Post hoc analysis (Tukey’s HSD) showed significant drops for each time period.



Oceans

**I have a feeling that my boat
has struck, down there in the depths,
against a great thing.**

**And nothing
Happens! Nothing...Silence...Waves...**

**—Nothing happens? Or has everything happened,
and we are standing now, quietly, in the new life?**

Juan Ramon Jimenez, translated by Robert Bly



*California Wild Rose (Rosa californica)
for bringing enthusiasm to life*

Study 3: The de los Angeles Study: A Psychiatric Practice in Havana

This study was conducted by Dr. María de los Angeles Fernández de la Llera, a psychiatric physician practicing in Havana, Cuba. She has specialty degrees in Homeopathy, Traditional Chinese Medicine, Human Development and EEI (Integrative Energetic Evaluation). Dr. de los Angeles works at the Bioenergetic and Flower Essence Therapy Department of the Psychiatric Hospital of Havana. She has participated in congresses/conferences in Bioenergetics, Natural and Traditional Medicine, and Homeopathy.

This study differs from the previous study in that more details are available about the subjects. The study consists of a pre-test and two months of treatment.

Patients were selected according to similar criteria as in the Ramos study. The selected patients had no previous flower essence therapy, reporting that they were depressed, and volunteering to be in the study.

Twenty patients were studied. All patients who entered the study completed the two-month study; there were no dropouts. The mean age of the sam-

ple was 50.12 years, ranging from 21 to 80 years. There were 4 males and 16 females. Seven of the patients had been suffering from depression for less than 1 year, with the shortest duration of depression being 3 months. The rest of the population had been suffering from depression for more than 1 year. Two had a 2-year history of depression, two had a 3-year history of depression, three had a 5-year history of depression, and one had a 6-year history of depression. Seven of the patients were concurrently on antidepressants, 9 were also utilizing tranquilizers, and 5 were concurrently receiving psychotherapy. Table 1 shows the most frequent symptoms seen in this population.

As with the prior studies, individualized prescribing was done, while using the EEI kinesiology method described previously to select flower essences for each patient. The most commonly used essences for this population were: **Mustard, Gentian, Wild Rose, Borage, Bleeding Heart, Star of Bethlehem, Sweet Chestnut, Honey-suckle, Gorse, Walnut, Chicory, Pine, Agrimony, White Chestnut, California Wild Rose, Yerba Santa, Aloe Vera, Milkweed, Sagebrush, Chamomile, Larch, Olive, Hornbeam, and Love-Lies-Bleeding.**

The results of this study are best represented in the two figures below. As can be seen in Figure 5, the BDI scores dropped significantly ($F(2,38)=193.21$; $p<.0000$) from baseline through therapy. They began in the severely depressed range, reaching the normal range by month 2. Post hoc analysis (Tukey's HSD) shows significant changes for each month. In Figure 6, we see a significant decrease in HAM-D scores ($F(1,19)=399.78$; $p<.0000$). Here, we see a 57% decrease in depression ratings, going from the moderately depressed, down into the mildly depressed range.

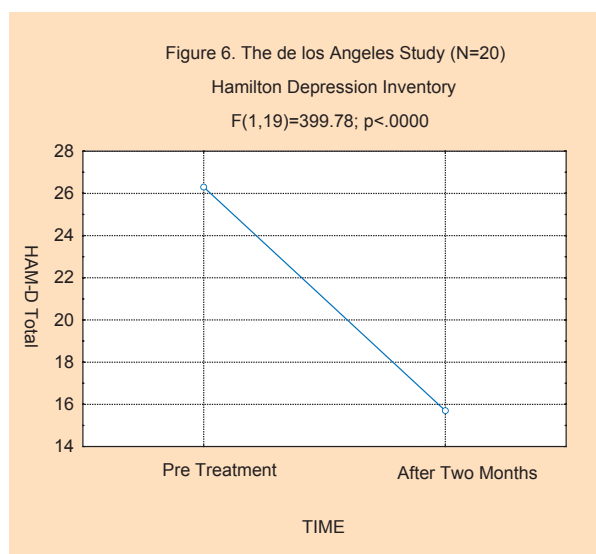
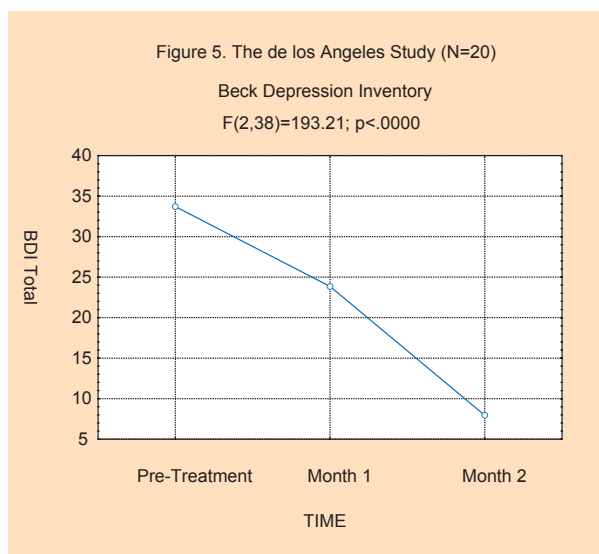


Table 1:
The Most Common Symptoms Seen in the de los Angeles Population

	Female	Male
Sadness/Depression	16	4
Guilt	10	2
Sleep Disorders	16	4
Effect on Work and Leisure	11	2
Agitation	4	0
Psychic Anxiety	16	4
Somatic Anxiety	9	2
Gastrointestinal Somatic Symptoms	8	1
General Somatic Symptoms	11	3
Loss of Sex Drive	13	2
Hypochondria	4	0
Weight Loss	5	1

Study 4: The Tena Study: A Holistic Psychiatric Practice

The fourth Cuban study is by Dr. Sol Inés Tena Rodríguez, a psychiatric doctor specializing in children and youth. She has taken courses in homeopathy, and traditional Chinese medicine (acupuncture), and has earned diplomas in Homeopathy; Human Development; and EEI (Integrative Energetic Evaluation). She is a member of the national group of professors of Flower Essence Therapy.

Dr. Tena works solely with natural and traditional medicines, including flower essences, homeopathy, and acupuncture at the 26 de Julio Polyclinic, Playa Township, Havana. She has participated in various conferences in Psychiatry, Homeopathy, and Natural and Traditional Medicine.

She presented a paper on her depression study research at the Ninth International Congress of Flower Essence Therapists (IX Congreso Internacional de Terapeutas Florales) in Cuernavaca, Mexico, October, 2002. Portions of this article are based on data presented at that congress.

Dr. Tena's study provides a more complete picture of the treatment outcome effects than the other studies, and contains much descriptive data on the population studied.

Patients for the study either showed up at the clinic on their own initiative for treatment for depression, or, more frequently, were referred by other doctors from the clinic where Dr. Tena works. Individual prescribing procedures were utilized, based on a clinical interview with the patient. Three of these subjects dropped out of the study, and there was incomplete data on one subject's initial HAM-D score, leaving 24 subjects for analysis for the BDI data and 23 subjects for the HAM-D data. There were 21 females and 3 males. The mean age of the population was 54.1 years, ranging from 33 to 75 years of age. The characteristics of depression are detailed in the tables on the next page. Table 2 shows the duration of the depression, while Table 3 shows the major symptoms of the group.

A total of 65 different flower essences were used for the 28 subjects. Table 4 shows the most commonly used essences and the therapeutic conflicts they address.

At the beginning of the study, 26 of the 28 patients were taking psycho-pharmaceutical medication. Dosages were gradually reduced and eliminated by the end of the study. Table 5 shows the drugs that were used by patients at the beginning of the study.

The outcome results of the study are presented in the two figures below. As can be seen in Figure 7, there is a significant decrease in the Beck Depression Inventory scores across time ($F(3,69)=100.21$; $p<.0000$). Here, the levels of depression go from the moderate range to the normal range. In addition, the effects of the flower essences on depression tend to stabilize by the second month of treatment. The data for the second and third months do

not significantly differ, while all other comparisons are significant using Tukey's HSD. In addition, Figure 8 shows significant effects of flower essences on the Hamilton Depression Scale as well ($F(1,22)=162.59$; $p<.0000$). The changes go from the severe range of depression to "nearly normal" levels of mood and affect.



Dr. Sol Inés Tena Rodríguez

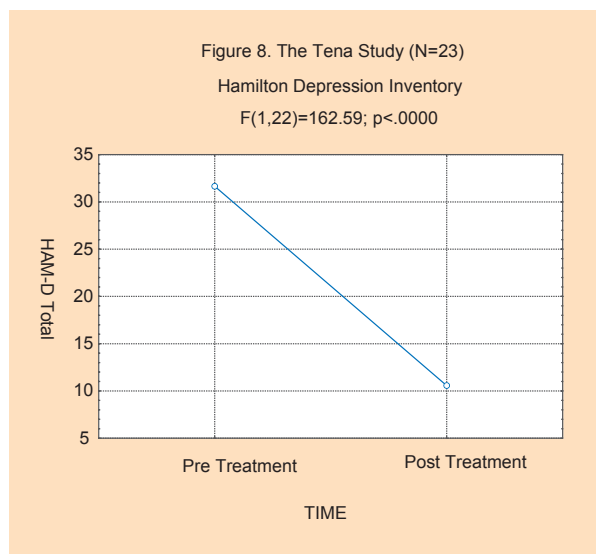
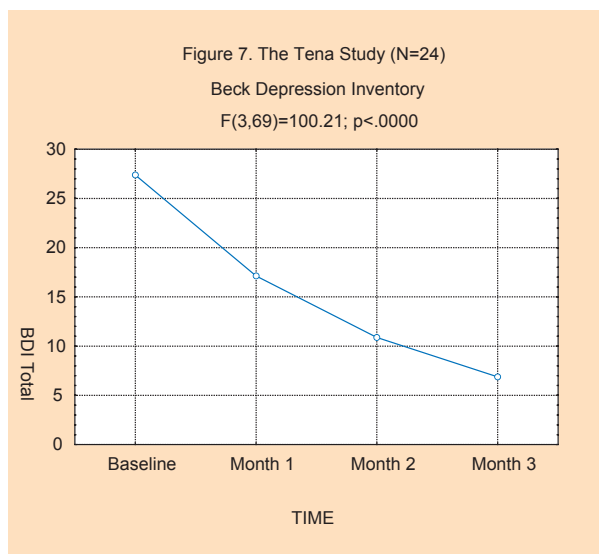


Table 2: Duration of Depression in the Tena Study

Duration	Number
1 month	3
2 months	1
3 months	6
4 months	2
5 months	2
6 months	2
10 months	1
1 year	1
2 years	2
3 years	5
25 years	1
27 years	1
Unknown	1

Table 3: Common Presenting Symptoms of the Tena Population

Symptom	Cases
Sadness	28
General Somatic Symptoms	23
Insight	23
Psychic Anxiety	23
Sleep Disorders	20
Somatic Anxiety	20
Hypochondria	18
Loss of Sex Drive	17
Guilt	16
Inhibited Speech or Thought	16
Loss of Appetite	16
Worsening of Symptoms in the Afternoon	16
Decline in Work Productivity	13
Symptoms of Obsession and Compulsion	13
Sudden Loss of Reality	11
Worsening of Symptoms in the Morning	11
Agitation	7
Suicidal Tendencies	7
Weight Loss	7
Suspect Symptoms of Paranoia	6
Other symptoms: Hopelessness, Distress, Self-aggression, Loneliness, Fear	

Table 4: Commonly Used Flower Essences in the Tena Study

Flower Essence	Therapeutic Conflict
Aloe Vera	For restoring exhausted vital energy when run down
Black-Eyed Susan	For blocking and repression, looking at the hidden side (shadow)
Bleeding Heart	For freeing from pathological and symbiotic emotional attachments
Borage	To provide joy in cases of abasement, grief, and disappointment
California Wild Rose	For dealing with apathy and lack of interest
Gentian	For reactive depression
Mountain Pride	To protect from negative thoughts and give strength to fight for life
Mustard	For endogenous depression
Self-Heal	To develop inner power of healing
Tansy	To stimulate decision to combat lack of initiative
Yarrow	For protection in midst of conflict

Table 5: Psycho-Pharmaceuticals Used by Patients at the Beginning of the Treatment in the Tena Study

Drug	Number of Cases
Trifluoperazine	9
Amitriptyline	9
Clorodiazepoxide	9
Diazepam	5
Nitrazepam	5
Imipramine	3
Medazepam	3
Meprobamate	3
Thioridazine	3

Study 5: The Cram Study: A Multi-Site Study in the USA

This is a multi-site study conducted in the United States. It has been previously published, and greater detail about the study's parameters may be seen in the original paper (Cram, 2001). In this study, a baseline of one month is collected during "usual care." Starting with the second month, the experimental treatment (flower essence therapy, described below) was added to the usual care. From a "within subject" A-B design perspective, when the baseline period is stable prior to the experimental procedure, any changes post-baseline are likely to be attributed to the experimental procedure.

There were 12 subjects in this study, coming from four clinical trial sites. The sites are listed at the bottom of Table 7. Three of the clinical trial sites were psychotherapy practices, contributing 11 of the 12 subjects to the study. Two of the psychotherapy practices were transpersonal in nature, while the third was cognitive and behavioral in its approach. The non-psychotherapy clinic was a naturopathic practice in which a combination of nutritional support was offered along with wellness counseling. There were 3 male and 9 female subjects, aged 35 to 79 years of age, with a mean of 48.5 years. They had been depressed for an average of 22 years. Nine had tried antidepressants, while 3 had not. At the time of the study, 8 patients were currently on an antidepressant, and had been on these for an average of 17 months.

Treatment was comprised of usual care, followed by usual care in combination with flower essence therapy. In all but one clinical trial site, the usual care entailed psychotherapy. One clinical trial site utilized naturopathic counseling for usual care. Over the course of the experimental treatment phase, patients were offered an average of eight different flower essences. Across the 12 subjects, a total of 65 different flower essences were used. For any given patient, the range of essences used went from a minimum of five essences for 1 patient to a maximum of 13 different essences for another patient. The flower essence therapy uti-

lized an "individualized" approach and was directed by the philosophy of "treating the individual, rather than the disease (depression)." The particular flower essence combination used with a patient was selected based upon the areas in the patient's life for which the therapist felt the patient needed support or were emerging as part of the counseling.

To give a sense of how flower essences are used clinically to treat depressed individuals in this study, the nine most common flower essences offered to these patients, along with their therapeutic themes, are listed in Table 6 (in alphabetical order). These essences occurred consistently in at least 25% of the patients.

Table 6: Therapeutic Themes of the Nine Most Commonly Used Flower Essences Used to Treat Depression in the Cram Study

Themes were abstracted from the *Flower Essence Repertory* (Kaminski & Katz, 1994).

Essence	Primary Defining Quality
Aspen	To draw upon inner strength while calming vague anxieties
Black-Eyed Susan	To awaken consciousness with penetrating insight into past traumas
California Wild Rose	To deal with apathy or resignation; to stimulate enthusiasm for life
Dandelion	To deal with tense over-striving while allowing greater inner ease and balance
Larch	To replace lack of confidence and failure with renewed self-confidence
Olive	To deal with exhaustion and fatigue by revitalizing the soul
Peppermint	To replace mental sluggishness with mindfulness and clarity
Scotch Broom	To replace pessimism and despair with optimism
Star Thistle	To replace the inability to give of oneself with a sense of abundance and trust

The results of the Cram study are presented at two levels. The first represents simple descriptive statistics on the level of change in depression for each subject, and the second analysis utilizes inferential statistics.

The descriptive statistics are presented in Table 7 below. Along with the demographic of the subject, the presence or absence of antidepressant use is described. In addition, the total number of flower essences taken by the subject over the treatment period is given, along with the number of times the clinician changed the flower essence formula over the course of the patient’s care.

As can be seen in this table, one half of the subjects made substantial changes in their depression scores (Beck change scores that were 10 points or more), one third of the subjects made moderate gains, and only 2 subjects made minimal changes. One should note that there are some discrepancies between the subjects’ self-ratings of depression (Beck) and those of the therapists (HAM-D). The level of change in the depression scores, however, does not appear to consistently sort along the lines of the clinical site (therapist), the use of antidepressant drugs, the total number of flower essences used to treat the patient, or the number of times the therapist changed the flower essence formula over the course of therapy.

In addition to the descriptive statistics above, two separate analyses using inferential statistics (ANOVA) were conducted. Each analysis involved an analysis of variance with repeated measures because of related samples. The first analysis considered the Period Effect. Here, the “within variable” had 5 levels (2 baseline, plus the 3 treatment measures.) In the second analysis, the interaction effects of concurrent use of antidepressants was considered. This was conducted using a group-blocking variable for current use of an antidepressant. As can be seen in Table 7, there were 8 subjects that were currently on antidepressants and 4 that were not.



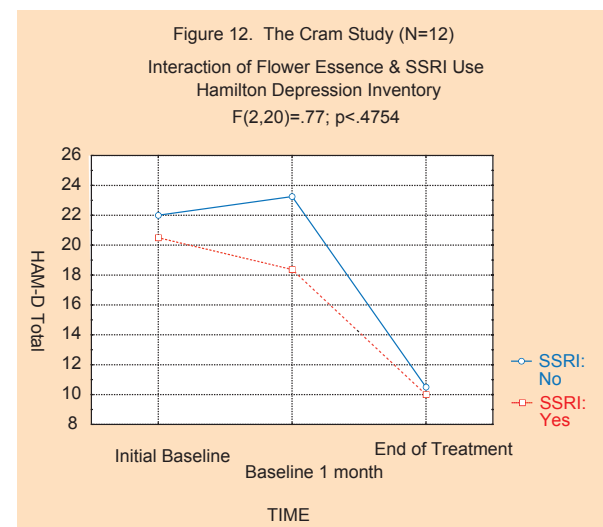
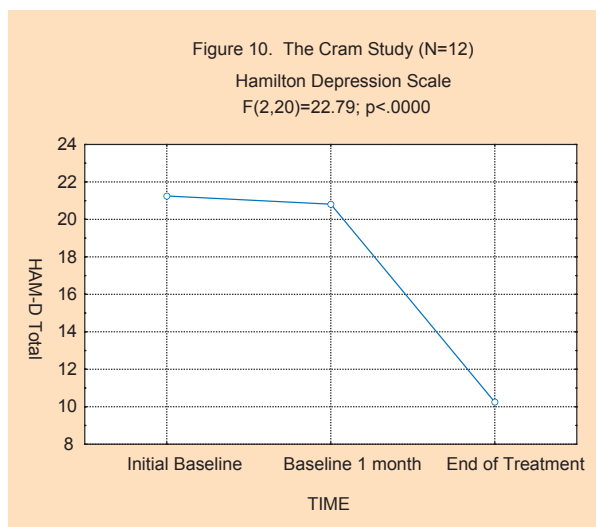
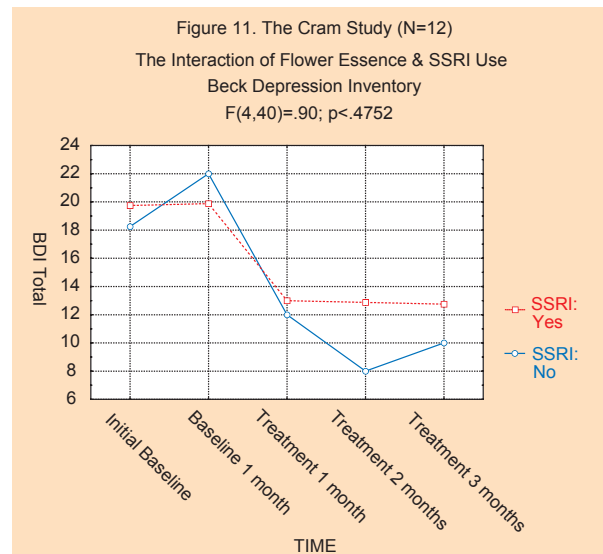
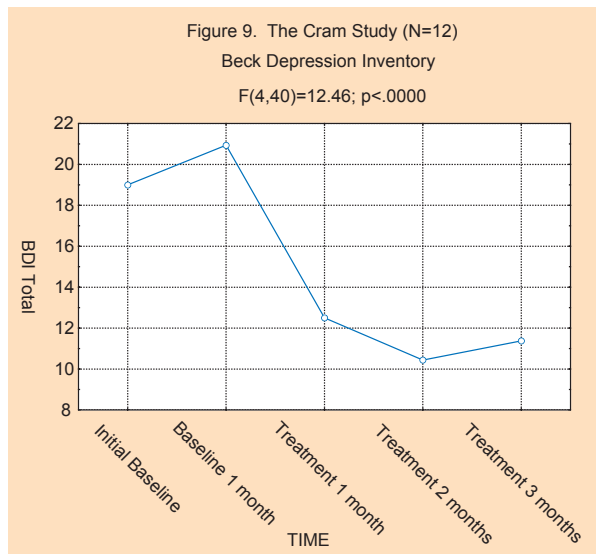
Table 7: Descriptive Statistics & Mean Change, Baseline to Treatment Phase, Cram Study

Attribute/Subject no.	1	2	3	4	5	6	7	8	9	10	11	12
Age/Sex	37/M	43/F	66/F	52/F	39/F	49/F	53/F	40/F	79/M	35/F	41/F	49/M
Clinical Site	1	2	1	3	3	3	3	2	1	2	2	4
Antidepressant	Prozac	None	None	Zoloft	Prozac	Pamelar	Prozac	Effexor	None	None	Celexa	Prozac
Total number of flower essences used	5	13	7	12	9	9	11	7	5	7	6	7
Number of changes in flower essence formula	1	3	1	2	2	2	2	1	0	2	0	3
Beck Change	16.83	14.33	6.00	2.83	13.50	4.83	6.83	6.67	12.17	8.00	4.00	0.00
HAM-D Change	12.00	17.00	8.00	12.00	9.50	9.00	17.50	8.50	11.00	12.50	2.50	4.50

Clinical Sites: 1= Jeffrey R. Cram, Ph.D (Nevada City, CA); 2= Constance Rodriguez, Ph.D.(Nevada City, CA);
3= Beth Wortzel, M.A., CSW (Madison, WI); 4=Reba Hatfield, N.D. (Charlotte, NC)

The results for Period Effect are reflected in Figures 9 and 10. As can be seen, the statistics on both the Beck Depression Inventory ($F(4,40)=12.46$; $p<.0000$) and Hamilton scores ($F(2,20)=22.79$; $p<.0000$) are highly significant, indicating that this Period Effect is highly consistent. The post hoc analysis shows that the two baseline data points are not significantly different from each other, while the treatment data points for both the BDI and HAM-D were significantly lower than the baseline points. Overall, the depression ratings dropped by approximately 50% during the treatment phase for both the BDI and HAM-D variables. These ratings shifted from the moderately depressed range down into the lower end of the mildly depressed range.

The second analysis concerning the concurrent use of antidepressant medications (“SSRI”) is presented in Figures 11 and 12. As can be seen, the level of significance for the two-way interactions (Period x Medication Group) was not significant for either the BDI ($F(4,40)=.90$; $p<.4752$) or the HAM-D ($F(2,20)=.77$; $p<.4754$). The decrease in both the BDI and HAM-D scores was similar, whether or not the subject was on an SSRI. This suggests that the use of anti-depressants did not interact with the effects of the flower essences, and strongly suggests that the effect on depression was solely due to the flower essences, and not the allopathic medications.



What is being tested in these studies is not a specific flower essence (or a specific combination of essences), but rather a method of individualized flower essence treatment.

Discussion: Individualized Treatment

This paper presents a series of independent studies on the use of flower essences in the treatment of depression. All five independent studies represent uncontrolled outcome studies, with each providing different levels of information. All five studies show a significant decrease in depression associated with the use of flower essence therapy. Taken as a whole, there is convergent data that supports the clinical use of flower essences in the treatment of depression.

It should be noted that there are several challenges to both the internal and external validity of these current studies. The first challenge has to do with “individualized” treatment versus standardized treatment. The “individualized” prescribing method of the flower essence practitioner certainly confuses the traditional operational definition of the independent variable. In the above studies, over 100 different flower essences were utilized, with an average of eight different essences being administered to a given subject. What is being tested in these studies is not a specific flower essence (or a specific combination of essences), but rather a method of individualized flower essence treatment. Such an “individualized” approach of “treating the individual, rather than the disease,” is very common in homeopathy. A recent meta-analysis by Cucherat et al. (2000) examined 118 clinical trials that involved individualized homeopathic therapies, and a slightly earlier meta-analysis by Linde and Melchart (1998) examined 32 clinical trials that compared individualized homeopathic therapies to placebo controls. While such an individualized prescribing approach does lend “noise” to the independent variable and the scientific method, it is the clinical method of choice for the alternative practitioner who uses flower essences, and thus should be allowed as a valid method.

Considering the Placebo Effect

The second threat to the internal validity of the study is its lack of a randomized control procedure. Without such controls, we cannot exclude the possible contamination to the study due to history, maturation, selection bias, and the placebo effect. One could cogently argue, for example, that the decrease in the depression scores had nothing to do with flower essences at all, but were merely a reflection of the sincerity and increased enthusiasm of the practitioner as he or she introduces the flower essences into the treatment of the patient.

However, in previous unpublished research on the use of flower essences on the treatment of depression, the senior author has conducted a pilot study on 6 subjects that employed a randomized double-blind placebo control group design. In this study, all 3 of the experimental subjects (flower essence) responded in the same fashion as did the subjects in the current study, with large, 50% or more, decrements in their BDI scores. In addition, 2 of the 3 placebo subjects (brandy carrier only) showed an impressive 50% decrement in BDI scores during the first month of



The fact that we see such significant response curves to the use of flower essences in all five studies clearly suggests that practitioners can use nontoxic, energetic substances to assist their patients in coping more effectively with depression. In a psychotherapy practice, flower essences appear to provide the practitioner with a tool to assist the patient in resolving psychological issues that pertain to and perpetuate depression.

treatment. However, by the second month of treatment, the BDI scores of the placebo responders were back to baseline and stayed elevated into the third month of placebo treatment. One of the placebo subjects was converted into a single case study format, and at the beginning of month 4, she was given the authentic individualized flower essence therapy. By the end of month 4, her BDI scores were reduced by 50% again. This time the BDI stayed down for the next 2 months. Such a crossover single subject design is very attractive, and lends evidence to the effectiveness of flower essences in the treatment of depression. Unfortunately, it is difficult to generalize beyond this one subject. It was the lack of generalization associated with single-subject designs that was the primary reason for the selection of the time series/within subject design used in the above studies.

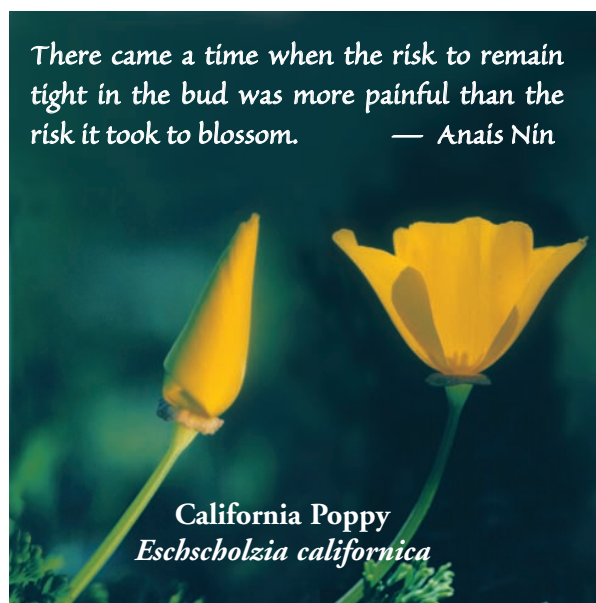
The problem with the placebo effect is not the fact that it exists. We should all celebrate its existence. The problem with the placebo effect is that its effects are typically short-lived and small in nature. Recent evidence suggests that patients with different types of depression and prognoses react differently to placebo and treatment. Schatzberg and Rothschild (in press) reported that the placebo response rate for nonpsychotic major depressive disorder is on the order of 25%, while the placebo response rate for psychotic depressions is only about 10%. The outcomes of the current study were in the 50% range, and far exceed those solely attributable to the placebo response.

Next, consider the duration of the placebo effect. Its therapeutic effects are typically short-lived, lasting 2 to 4 weeks. In the Cram and Tena studies, the 3-month treatment period is one of

the strongest arguments in favor of the fact that flower essences were more active than the placebo effect. This is reflected in the fact that the changes in the BDI and HAM-D scores endured over a 3-month period of time.

Some might argue that depression typically resolves more slowly than over a period of 4 months, and that that is why most studies of depression span a period of 6 to 9 months. The 2- to 4-month nature of the current studies may not allow one to examine the true nature of the treatment response. Some patients, for example, may relapse after the initial reprieve, while others may not respond to the treatment until the fifth or sixth month. The 4-month duration of the current study lacks follow-up and the possible assessment of relapse. Thus, the short duration of these studies may possibly weaken their findings.

There came a time when the risk to remain tight in the bud was more painful than the risk it took to blossom. — Anais Nin



California Poppy
Eschscholzia californica

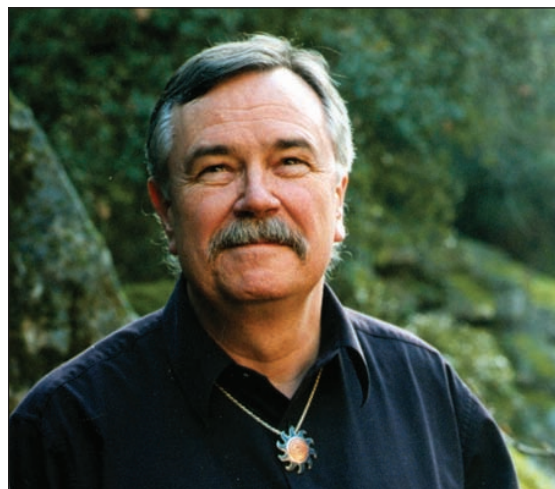
A secondary analysis of the data by Cram was conducted to determine whether SSRI medications would interfere with the therapeutic use of flower essences, and vice versa. This post hoc analysis did not show a separation between the two groups (SSRI medicated and unmedicated) in their responses to the introduction of flower essence therapy. Thus, it appears that being on an SSRI does not interfere with the psychotherapeutic and flower essence aspects of the treatment. One should note, however, that the small number of patients in the medicated and unmedicated groups, coupled with their self-selection, weakens our ability to generalize the results to the population in general.

The fact that we see such significant response curves to the use of flower essences in all five studies clearly suggests that practitioners can use nontoxic, energetic substances to assist their patients in coping more effectively with depression. In a psychotherapy practice, flower essences appear to provide the practitioner with a tool to assist the patient in resolving psychological issues that pertain to and perpetuate depression. Some practitioners might think of a flower essence remedy as a “transitional

object” (Winnicott, 1953). For example, during the psychotherapy session, the therapist might be assisting the patient to become more aware of how the patient’s traumatic childhood plays a role in her chronic depression. As part of the therapy, the practitioner adds Black-Eyed Susan to the flower essence combination and tells the patient that this will assist her in retrieving or resolving those childhood memories. The theme, initiated during the therapeutic session, is facilitated and continued at home by the patient through her use of the essence. The flower essences reinvigorate the theme as they are taken orally on a daily basis.

The large number of replications presented in this paper document the clinical effectiveness of flower essences in the treatment of depression and provide a strong and compelling basis for using these tools clinically to treat depression. Further inquiry is, of course, needed. Randomized control group studies would provide additional evidence, along with longer, 6- to 8-month periods of treatment. Ultimately, randomized placebo-controlled studies would provide the strongest base of evidence as to the effectiveness of these nontoxic flower essences in the treatment of depression.

Dr. Jeffrey Cram, Ph.D. is currently the director of the Sierra Health Institute of Nevada City, California, where he coordinates and treats patients using a holistic approach to psychology. This includes such approaches as transpersonal psychology, cognitive behavioral therapies, biofeedback, flower essence therapy, aromatherapy, bioenergetics and music therapy. He is the founding president of the Surface EMG Society of North America (SESNA). He is the author of three books and 35 articles on surface Electromyography, has an active interest in research, and is currently the Principal Investigator on a Flower Essence and Depression clinical trial, and is consulting on several clinical studies. He is on the editorial list of four journals (AJPM, JAPB, JMPT, IJHC). Dr. Cram is an international expert on surface Electromyography and the use of flower essences in a psychotherapeutic practice.



Contact information:

Dr. Jeffrey Cram, Ph.D., Sierra Health Institute
202 Providence Mine Rd., Suite 202
Nevada City, CA 95959 USA
phone: (530) 478-9660, fax: (530) 478-1432
e-mail: cram@semg.org website: www.semg.org

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