ORIGINAL ARTICLE

Homoeopathic management in depressive episodes: A prospective, unicentric, non-comparative, open-label observational study

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ABSTRACT

Objective: To evaluate the role of homoeopathic medicines in the management of depressive episodes.

Material and Methods: A prospective, non-comparative, open-label observational study was carried out from October 2005 to September 2010, by the Central Council for Research in Homoeopathy (CCRH) (India), at — the Central Research Institute CRI (H), Kottayam. Patients who were 20-60 years of age, suffering from mood disorders were screened for inclusion and exclusion criteria. Homoeopathic medicines were prescribed in 30, 200 and 1M potencies, after repertorising the symptoms and signs and final consultation with the Materia Medica. The internationally accepted scales — Hamilton Depression Rating Scale (HDRS), Beck Depression Inventory (BDI) and Clinical Global Impression (CGI) — were used to assess the symptoms at each visit and measure the outcome. The follow up of 12 months included six months of observation period. Analysis was done as per the intention-to-treat (ITT) principle using SPSS version 20.

Results: Eighty-three patients (35 males and 48 females), who fulfilled the inclusion and exclusion criteria were enrolled in the study. Out of these, 67 patients completed the follow-up, 16 patients did not attend the Outpatient Department (OPD) for varying periods. The ITT principle was applied for the analysis considering their last observations. A statistically significant (P = 0.0001, P < 0.05) difference in the mean scores of HDRS, using the paired t-test, was observed. The mean scores at baseline and at end were 17.98 ± 4.9 and 5.8 ± 5.9, respectively. Statistically significant differences were also observed in the BDI and CGI scales. The most frequently used medicines were: *Natrum muriaticum (n = 18), Arsenicum album (n = 12), Pulsatilla nigricans (n = 11), Lycopodium clavatum (n = 7)* and *Phosphorus (n = 6)*.

Conclusion: A course of six months of homoeopathic treatment is associated with significant benefits in patients suffering from depressive episodes, as measured by HDRS. Further controlled studies are needed to assess the efficacy.

Keywords: Arsenicum album, Depressive episode, Homoeopathy, Lycopodium clavatum, Natrum muriaticum, Observational study, Open trial, Phosphorus, Pulsatilla nigricans

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INTRODUCTION

Major depressive disorder (unipolar depression) is reported to be the most common mood disorder.[1] In a typical episode, the patient suffers from lowering of mood, reduction of energy and decrease in activity.[2] It is the fourth leading contributor to the Global Burden of Disease, in terms of Disability-Adjusted Life-Years (DALYs) and is projected to rank second by the year 2020.[3] Its prevalence rates in the community samples vary from 1.7 to 74 per thousand Indians.[4] About 6-8% of all outpatients in the primary care settings satisfy the diagnostic criteria for the disorder.

Depressed people who lead a sedentary lifestyle, are more likely to smoke and consume alcohol and share a reciprocal link with obesity.[5] It is a risk factor for stroke, and post-stroke depression and is associated with higher mortality.[6] Nearly 30-60% of the patients with depression and also suffer from pain syndromes[7] and a history of major depression represents a risk factor for disease severity in early inflammatory arthritis.[8] Depression is associated with non-compliance to medical treatment.[9] The treatment choices for depression conventionally include antidepressant medications, psychotherapy, electroconvulsive therapy and light therapy, administered alone or in combination.[10]

The treatment of mental health disorders, such as, depression, grief, anxiety and phobia are a significant feature of the practice caseload of homoeopathic practitioners.[11] However, major questions regarding the effectiveness and appropriate role of Homoeopathy in the management of depression are still unanswered.[12] There is a lack of high quality clinical trials and incorporation of preference arms or uncontrolled observational studies have been suggested to be methodologically suitable for further studies in this direction.[13] Systemic reviews of randomised placebo-controlled studies with homoeopathic treatment in psychiatry do not preclude the possibility of some benefit.[14] The feasibility of a randomised, placebo-controlled, clinical trial of homoeopathic treatment for depression in general practice is still questioned. A single, double-blind, placebo controlled randomised trial, to assess the efficacy of homoeopathic medicines, found that individually prescribed homoeopathic medicinal products (HMPs) were non-inferior to Fluoxetine, at four and eight weeks of treatment.[15] Two double-blind, placebo-controlled trials, testing the efficacy of individually prescribed HMPs, both failed to recruit a sufficient number of participants, thus preventing analysis of results[16] or resulted in a premature ending of the trial.[17] In observational studies,[18,19] a majority of patients receiving treatment for depression from homoeopaths report improvement.

Twenty-seven cases studied in an open study on behavioral disorders undertaken by the Central Council for Research in Homoeopathy (henceforth Council) also suggested improvement in depressive neurosis.[20] Although the results were positive, the study was not well-designed, was under-powered and lacked rigor. Thus, an observational, non-comparative study was planned to evaluate the homoeopathic management in depressive episodes.

Primary Objective
To ascertain the usefulness of homoeopathic medicines in the management of 'Depressive Episodes'.

Secondary Objectives
- To verify the characteristic symptoms of useful medicines
- To determine the most useful strategy for the management of different intensities of depressive disorder
- To prevent the progression to bipolar disorder
- To prevent the relapse of a depressive episode.

MATERIALS AND METHODS

Study Design
A prospective, non-comparative, open-label observational study was conducted from October 2005 to September 2010 at the placed with CRI (H), Kottayam, Kerala, India, under Central Council for Research in Homoeopathy (CCRH). Experience Homoeopaths were responsible for prescribing homoeopathic medicines, collecting data, checking the follow ups and was trained to implement the study protocol. One psychiatrist consultant was also engaged for the study. All patients gave a written informed consent. The study got the clearance from the Ethical Committee and followed the Declaration of Helsinki[21] and Good Clinical Practices for Clinical Research in India.[22] The patients were admitted to the Indoor Patient Department of the institute, as and when required. The study was funded by CCRH,

Department of AYUSH and the Ministry of Health and Family Welfare, Government of India.

Patients and Setting

Patients of both sexes, between the ages of 20 and 60 years were screened for symptoms of depression according to diagnostic criteria of ICD-10.[23]

Inclusion Criteria

Patients presenting with depression of not less than two weeks duration, with a minimum of two of the 'Typical' and two of the 'Common symptoms', willing to participate, were included in the study.

A. Typical symptoms
- Depressed mood
- Loss of interest and enjoyment
- Increased fatigability and diminished activity

B. Common symptoms
- Reduced concentration and attention
- Reduced self-esteem and self-confidence
- Idea of guilt and unworthiness (even in a mild type of episode)
- Bleak and pessimistic view of the future
- Ideas or acts of self-harm or suicide
- Disturbed sleep
- Diminished appetite

Exclusion Criteria
- Depression due to substance abuse
- Mood disturbances when associated with schizophrenia, schizophreniform disorder, schizoaffective disorder or psychotic disorder not otherwise specified
- Bipolar affective disorders
- Persistent mood disorders
- Cases diagnosed with life-threatening diseases or currently active physical disease, for which medicine is being adjusted
- Currently receiving treatment with an effective antidepressant (Patient may be considered for inclusion in the study after two weeks wash-out period)
- Any other condition requiring emergency or surgical intervention
- A lifetime or current diagnosis of schizophrenia, schizoaffective disorder, or manic depressive psychosis
- Pregnancy and lactation (pregnancy test to be done in initial screening, if required)
- Patient who improve 25% or more in the symptoms score during the 'run-in' period
- Patient with Vitamin B12 deficiency

- Hypothyroidism
- Actively suicidal
- Depression secondary to physiological effects of medications

Before enrolment into the study, all the patients were observed for a 'run-in period'[24] of one week, without any intervention (given placebo) to confirm the true episode of depression and in case of spontaneous improvement, that is, a decrease of 25% or more in HDRS, that patient was excluded from the study. If the symptoms continued even after the run-in period, written informed consent was obtained and then the patient was enrolled.

Selection of Medicine

The investigators of the study made an in-depth interview with the patients and their relatives, as per the guidelines laid down by Hahnemann,[25] for matching the patients' symptoms and the homoeopathic medicines. Each case was recorded in detail in a Case Recording Performa (CRP) designed for the study, based on classical homoeopathic principles. After case analysis the symptoms of each case were repertorised. The similinum was selected on the individualisation of the patient as per the repertorial result, in consultation with the Materia Medica. The medicines were procured from the pharmacy having the Good Manufacturing Practices certificate and approved by the Scientific Advisory Committee of the Council.

Intervention

A single dose (four pills, size no. 30) of the selected medicine in 30C was given to the patients, to be taken empty stomach, followed by placebo next day onwards, thrice a day, for one week. Each patient was treated by a change in medicine or change in potency during the subsequent follow ups, as per homoeopathic principles. There was no adjunctive therapy (e.g., counselling, psychotherapy), however, the investigator discussed the problems faced by the patients during the follow ups, if required. The patients in the study were not allowed any other medication except the individualised homoeopathic medicine. In case of acute exacerbation of depression or any other acute disease condition, the medicine selected was either a continuation of the pre-selected medicine, or a better indicated medicine. This medicine was prescribed repeatedly as per the intensity of the acute exacerbation. If the patient's symptoms or condition did not improve

or was aggravated by the homoeopathic medicines, that patient was referred for allopathic treatment.

The response was assessed and further treatment was given as per the guidelines of Hahnemann[21] and Kent.[26] Appearance of any change (relief/worse) and status quo was followed by administration of placebo/change of potency/change of remedy, as per the need of each case.

Treatment and Follow up

The six-month treatment period was followed by six months of 'observation period', when the patient did not receive either placebo or medicine during consultations. During this period, the progress of the disease as well as relapse after ceasing treatment was observed. All efforts were made to ensure compliance of instructions and adherence to the prescribed therapeutic schedule. Follow-up visits were carried out weekly or fortnightly in the first month of treatment and every month thereafter, for 11 months.

Outcome Assessment

The intensity of depression was measured by using the validated scales. These are, the 17-point questionnaire Hamilton Depression Rating Scale (HDRS) and the 21-point Beck Depression Inventory (BDI). Other assessment measures were the Clinical Global Impression (CGI-1) scale (on a scale of 1-7), a validated measure of illness severity and Clinical Global Improvement (CGI-2) owing to treatment. The data related to these questionnaires were collected at baseline and at monthly intervals for 12 months by the investigators and consultant psychiatrist.

Based on the total HDRS score, the intensity of depression was further classified as mild (10 to ≤13), moderate (14 to ≤17), or severe (17 and above), on the 21-point BDI and the CGI-1 (on a scale of 1-7) and CGI-2 scales. The intensity of the disease was assessed on all scores, based on the HDRS scores, at baseline and on each follow-up visit. The diagnosis and scores of all these patients were confirmed by a psychiatrist. If the patient was on any other medication, he/she was advised to discontinue it for at least two weeks prior to enrolment (wash-out period).

The primary outcome measure was a change in the HDRS scores. The change was calculated using the formula {(Baseline score - score at end)/baseline score } ×100. Changes were graded as: Cured (100% improvement), marked improvement (75 to <100%), moderate improvement (50 to <75%), mild improvement (25 to <50%), not significant (<25%), not improved (no change) and worse (increase in symptoms score). However, the improvement of the individual symptoms on the HDRS and BDI scales were also analysed, as a reduction in score was considered as improved, increase in score as worse and no change in score as static.

Statistical Analysis

Statistical analysis was conducted through the SPSS software version 20 with the Intention-to-treat (ITT) analysis. Patients who had at least one visit, apart from the baseline, were included for analysis. The ITT principle was applied for conducting the analysis, considering the last observations carried forward. The baseline mean questionnaire scores (HDRS and BDI) were compared with the mean scores at the end, using comparative analysis of the paired t-tests. A two-tailed alpha of less than 0.05 ($P < 0.05$) was considered statistically significant. The data from CGI scales were represented using the median/inter-quartile range. Repeated measures of the analysis of variance (ANOVA) test was used to compare the changes in the HDRS scores at various time points during the study. Parametric tests were used for continuous data and non-parametric tests were used for ordinal data. The formulae for effect size calculation were: Effect size = difference of means/pooled standard deviations for continuous data and effect size = $Z/\sqrt{N}$ in the case of ordinal data, where Z was the Z score and N was the total number of observations. They were classified as, r = 0.5, large; r < 0.3, medium; r = 0.1, small. The $P < 0.05$ was considered significant.

RESULTS

A total of 83 patients diagnosed with depressive episodes, who qualified the predefined inclusion criteria were enrolled and analysed in the study. Out of these, 67 patients completed the follow-up of one year, including the six-month observation period, 16 patients did not complete the follow up and attended the OPD for varying periods. The ITT principle was applied for conducting the analysis, considering the last observations carried forward, for 16 patients. Among the study population, the maximum patients who enrolled were in the age group of 31 to 40 years. Patients who suffered from episodes of depression for less than one year formed 45.8% (*n*

= 38) of the total number of patients and 43% of the patients (*n* = 37) had depression for one to ten years. It was also observed that 77.10% (*n* = 64) of the depressives suffered from moderate-to-severe intensity. It was seen from the baseline profile that 84.33% of the participants (*n* = 70) were educated merely up to the tenth grade, intermediate or diploma classes. Moreover, 22.89% participants (*n* = 19) belonged to the poorest sections (Labourers and farmers) of the society. The baseline details of all the patients, along with the duration of illness and intensity, are reflected in Table 1.

The HDRS scores showed that at the baseline, 19 patients had depression of mild intensity, 19 had depression of moderate intensity and 45 had depression of severe intensity. The intensity of patients during treatment and in the observation period only is reflected in Table 2. The outcome assessment based on the HDRS scores, indicated that 48 patients had improved markedly, 17 moderately and 2 mildly, however, 16 cases were static [Table 3]. The mean HDRS score analysed at baseline was 17.98 ± 4.9. The mean score at six months of the treatment period was 8.7 ± 5.8 and at end was 5.8 ± 5.9. The difference in the mean scores at baseline and at end was found to be statistically significant (*P* = 0.001, <0.05) [Table 4]. Repeated Measure ANOVA and Friedman's tests were used to analyse the scores based on HDRS, BDI, CGI-1 and CGI-2, at various follow-up times of baseline. The scores at the third month, sixth month, ninth month and twelfth month are significantly different (*P* = 0.001) [Table 4].

The differences in individual symptoms based on the HDRS scale and BDI scale present at baseline and at the end were statistically significant. Reduction in score was considered as improved, increase in score as worse and the no change in score as static [Tables 5 and 6]. Although there was worsening in some of the individual symptoms on the scales used, not even a single case went into adverse condition. Eleven different remedies were prescribed during the course of the study. All medicines were prescribed for six months of the study, except in one patient where *Natrum muriaticum* was prescribed at nine months due to relapse of the acute symptoms. However, no patient reported any adverse event during the study period. The most frequent first prescriptions were *Natrum muriaticum* (24.09%, n = 20)*, Arsenicum album* (14.5%, *n* = 12)*, Pulsatilla nigricans* (15.7%, *n* = 13)*, Phosphorus* (12%, *n* = 10)

and *Lycopodium clavatum* (9.6%, *n* = 8). These five medicines together accounted for 62 cases (74.69% of the study group). Other prescribed medicines included *Nitricum Acidum, Aurum metallicum, Calcarea carbonica, Ignatia, Lachesis mutus, Nux vomica, Sepia Officinalis* and *Sulphur* [Table 7].

Table 1: Baseline profile

	No. of cases	Percentage	Mean±S.D
Gender			
Male	35	42.2	
Female	48	57.8	
Age group (in years)			40.39±10.40
20-30	13	15.7	
31-40	31	37.3	
41-50	23	27.7	
51-60	16	19.2	
Marital status			
Single	28	33.7	
Married	52	62.7	
Widow	3	3.6	
Education			
Up to tenth	18	21.7	
Tenth Class	25	30.1	
Intermediate (+2)	18	21.7	
Graduation	9	10.8	
Post graduation	3	3.6	
Diploma	9	10.8	
Not ascertained/Not mentioned	1	1.2	
Occupation			
Labourer	18	21.7	
Farmer	1	1.2	
Student	6	7.2	
Business	5	6.0	
Social worker	1	1.2	
Government employee	5	6.0	
Home maker	33	39.8	
Unemployed	7	8.4	
Not mentioned	3	3.6	
Duration of disease			1.92±1.02
<1 year	38	45.8	
1-5 years	23	27.7	
5-10 years	14	16.9	
>10 years	7	8.4	
Not mentioned	1	1.2	
Intensity of disease			7.861
Mild (HDRS score 10-13)	19	22.8	
Moderate (HDRS score 14-17)	19	22.8	
Severe (HDRS score>17)	45	54.2	

HDRS: Hamilton depression rating scale, SD: Standard deviation

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Table 2: Intensity of depression, during treatment and observation period

Intensity*as per HDRS score	No. of patients			
	Baseline	Treatment period		Observation period only
		Third month	Sixth month	Ninth month	Twelfth month
Mild (10-13)	19	20	16	11	07
Moderate (14-17)	19	16	11	05	05
Severe (>17)	45	11	07	07	06
HDRS score 0-9 (Non-depressive)	0	36	49	60	65

*HDRS score 10 to 13-mild, 14 to 17-moderate and above 17-severe intensity of depression

Table 3: Outcome assessment on HDRS scores after one year

Intensity at base	Improvement status				P value
	Marked	Moderate	Mild	No change	
Mild (*n*-19)	7	5	0	7	0.05*
Moderate (*n*-19)	12	3	1	3	
Severe (*n*-45)	29	9	1	6	
Total	48	17	2	16	

*McNemar test shows *P*<0.05 is significant

Table 4: Symptom scores at entry and at the end of treatment

Levels of assessment	Mean±SD		Median (IQR)	
	HDRS symptoms score	BDI symptoms score	CGI-1 score	CGI-2 score
At entry	17.98±4.9	23.4±6.9	4 (3.2-5)	-
At three months	11.1±6.2	14.2±8.1	3 (2-4)	2 (2-3)
At six months	8.7±5.8	10.5±8.3	2 (1-3)	2 (1-2)
At nine months	6.9±5.8	8.3±8.5	1 (1-3)	1 (1-2)
At one year	5.8±5.9	7.1±8.7	1 (1-2)	1 (1-1)
Wilks' Lambda	0.270	0.264		
F value/chi square	129.9	140.5	197.6	106.5
P value	0.001*	0.001*	0.001§	0.001§
Effect size	0.74	0.72	0.82	0.79

P value calculated by using Repeated Measure ANOVA. §*P* value calculated by using Friedman's test. *P* value is significant at<0.05

Change of remedy was necessary only in five patients during the course of the study, because of aggravation or no change in symptoms after the first prescription. In the second prescription, *Natrum muriaticum* was prescribed in two cases and *Lycopodium, Pulsatilla* and *Phosphorus* in one case each. However, *Natrum muriaticum* was continued in one patient, due to acute persistence of the disease, even after

Table 5: Assessment of individual symptoms of the HDRS Scale

Symptoms of HDRS	No. of patients				P value
	Baseline	at 12 months			
		Better	Worse	Static	
Depressed mood	83	44	0	39	NA
Feeling of guilt	76	53	1	29	0.001*
Suicide	63	51	0	32	0.001*
Insomnia early	51	34	3	46	0.001*
Insomnia middle	45	36	1	46	0.001*
Insomnia late	45	33	1	49	0.001*
Work and activities	81	28	0	55	0.001*
Retardation	56	51	0	32	0.001*
Agitation	21	13	0	70	0.001*
Anxiety psychic	78	12	2	69	0.001*
Anxiety somatic	72	52	2	29	0.001*
Gastro-somatic	54	47	0	36	0.001*
Somatic general	72	31	6	46	0.001*
General symptoms	59	43	2	38	0.001*
Hypochondriacs	51	38	0	45	0.001*
Loss of weight	34	29	0	54	0.001*
Insight	9	6	0	77	0.031*

McNemar test shows *P*<0.05* is statistically significant, HDRS: Hamilton depression rating scale, NA: Not applicable

Table 6: Assessment of individual symptoms of beck depression inventory

Symptoms of beck depression inventory	No. of patients				P value
	Baseline	at 12 months			
		Better	Worse	Static	
Sadness	83	44	0	39	NA
Hopelessness	78	51	1	31	0.001*
Past failure	67	60	0	23	0.001*
Anhedonia	69	57	0	26	0.001*
Guilt	71	49	0	34	0.001*
Punishment	27	17	0	66	0.001*
Self-dislike	64	49	0	34	0.001*
Self-blame	68	54	1	28	0.001*
Suicidal thoughts	62	52	0	31	0.001*
Crying	40	31	0	52	0.001*
Agitation	21	15	0	68	0.001*
Loss of interest	82	25	0	58	0.001*
Indecisiveness	82	32	4	47	0.001*
Worthlessness	75	45	1	37	0.001*
Loss of energy	78	21	2	60	0.001*
Insomnia	77	38	0	45	0.001*
Irritability	63	32	2	49	0.001*
Decreased appetite	41	52	0	31	0.001*
Diminished concentration	63	58	0	25	0.001*
Fatigue	72	47	0	36	0.001*
Lack of interest in sex	82	34	1	48	0.001*

McNemar test shows *P*<0.05* is statistically significant, NA: Not applicable

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Table 7: Medicines prescribed during the study, indicating the change in status of patients at the end

Name of medicine/ No. of patients prescribed at baseline	Intensity at baseline	No. of patients prescribed	Change in status (No. of patients)			
			Marked improvement	Moderate improvement	Mild improvement	Static
Natrum muriaticum/20	Severe	15	12	1	0	2
	Moderate	3	3	0	0	0
	Mild	2	1	1	0	0
Arsenicum album/12	Severe	6	4	2	0	0
	Moderate	6	5	1	0	0
	Mild	0	0	0	0	0
Pulsatilla nigricans/13	Severe	8	4	2	0	2
	Moderate	1	0	1	0	0
	Mild	4	2	2	0	0
Lycopodium clavatum/8	Severe	5	4	1	0	0
	Moderate	3	1	0	1	1
	Mild	0	0	0	0	0
Phosphorus/10	Severe	3	1	1	0	1
	Moderate	2	2	0	0	0
	Mild	5	2	0	0	3
Sulphur/4	Severe	3	3	0	0	0
	Moderate	0	0	0	0	0
	Mild	1	0	1	0	0
Lachesis mutus/3	Severe	2	0	1	0	1
	Moderate	0	0	0	0	0
	Mild	1	1	0	0	0
Aurum Metallicum/2	Severe	1	0	1	0	0
	Moderate	1	1	0	0	0
	Mild	0	0	0	0	0
Sepia succus/2	Severe	0	0	0	0	0
	Moderate	1	0	1	0	0
	Mild	1	0	1	0	0
Calcarea carbonica/2	Severe	0	0	0	0	0
	Moderate	0	0	0	0	0
	Mild	2	1	0	0	1
Nux vomica/1	Severe	1	1	0	0	0
	Moderate	0	0	0	0	0
	Mild	0	0	0	0	0
Nitricum acidum/1	Severe	0	0	0	0	0
	Moderate	1	0	0	0	1
	Mild	0	0	0	0	0
Ignatia amara/1	Severe	0	0	0	0	0
	Moderate	0	0	0	0	0
	Mild	1	0	0	0	1
Placebo/4	Severe	1	0	0	1	0
	Moderate	1	0	0	0	1
	Mild	2	0	0	0	2
Total		83	48	17	02	16

six months of treatment. All the medicines were associated with a statistically significant change in the HDRS score from baseline to six months and 12 months ($P < 0.05$), except *Aurum metallicum* ($P = 0.20$) (prescribed in two patients only) [Table 8].

DISCUSSION

In this study, although analysed as per ITT, 19.27% of the enrolled patients (*n* = 16) could not be followed-up due to non-compliance to the study protocol. The data supports the earlier knowledge that non-adherence to medications and treatment protocols is a major issue in depression.[27] In this study also, 22.89% of the patients (*n* = 19) belonged to the poorest sections (Labourers and farmers) of the society, strengthening the earlier studies that lower socioeconomic status is associated with higher levels of depression.[28-30] Various studies show women to be more frequent sufferers of depression.[31,32] The baseline data of this study corroborate these findings.

From the baseline HDRS scores, it was found that with homoeopathic treatment, out of the 45 patients who had severe intensity of depression, 29 (64.4%) patients had remarkable improvement in their overall condition and the HDRS scores fell below 10 at the end of study. Similar results were also seen in those suffering from moderate and mild intensity of depression. The duration of illness did not have an impact on the outcome of treatment. The participants' HDRS scores improved steadily over time, as measured at the third, sixth, ninth and twelfth follow-up visits.

The homoeopathic medicines that were prescribed for those patients who reportedly had improvement (as measured by name outcome measure) were *Natrum muriaticum, Arsenicum album, Pulsatilla nigricans, Lycopodium clavatum, Phosphorus, Sulphur, Lachesis, Aurum metallicum, Sepia, Calcarea carbonica* and *Nux vomica*. A study on distress during climacteric years,

which included symptoms of depression, found *Sepia, Lachesis, Calcarea carbonica, Lycopodium clavatum* and *Sulphur* as the most effective medicines.[33] Similarly, another study implicated *Arsenicum album, Calcarea carbonica, Lycopodium clavatum, Natrum muriaticum, Phosphorus, Sulphur* and *Sepia* as useful medicines for the treatment of depression.[15] These results have laid the foundation to evolve a group of medicines that are more frequently needed to treat depression. Further clinical investigation on the effectiveness of these medicinal agents in treating depression will provide precise information on their usefulness to the homoeopathic practitioners.

This study showed that homoeopathic medicines had a promising role in the management of depressive episodes, which had to be followed by randomised clinical trials. It was found that none of the patients progressed to bipolar disorder during the follow up of one year. Relapse of the symptoms was observed in only one patient during the observation period. No adverse event was reported with the treatment. Treatment following classical homoeopathic principles, based on totality of symptoms and change of medicine in case of aggravation or no relief, was found to be effective in relieving various intensities of depressive episodes.

After the treatment period, there was a six-month observation period when neither medicine nor placebo was given. Even during this period, continued improvement was noticed in all the assessment parameters. This finding strengthened the claim that the effect of homoeopathic medicines is not merely a placebo effect.[34,35]

According to Katz *et al.*, a general, practice-based,

Name of the medicine	No. of cases (%)	Mean±SD of HDRS score			P value
		Baseline	6 months	12 months	
Arsenic album	12 (14.5)	19.25±4.39	7.25±4.71	3.42±2.10	0.001*
Aurum Metallicum	2 (2.4)	16.50±3.54	7.00±7.07	3.50±2.12	0.205
Calcarea Carbonica	2 (2.4)	12.50±2.12	7.00±5.66	7.00±5.66	0.023*
Lachesis	3 (3.6)	16.33±2.88	7.33±3.05	7.00±3.60	0.029*
Lycopodium	8 (9.6)	19.13±4.48	8.88±4.6	5.13±4.85	0.001*
Natrum Muriaticum	19 (22.9)	19.74±5.33	7.16±5.15	3.42±4.11	0.001*
Phosphorus	10 (12.0)	14.70±3.80	8.20±6.26	8.33±6.53	0.001*
Pulsatilla	13 (15.7)	18.62±6.11	10.38±8.31	7.15±8.84	0.001*
Sepia	2 (2.4)	14.50±3.53	9.50±2.12	4.50±0.70	0.033*
Sulphur	4 (4.8)	18.75±3.86	7.75±5.90	3.00±2.58	0.002*

Table 8: Medicines indicating changes in the HDRS score

*P<0.05 is statistically significant, HDRS: Hamilton depression rating scale, SD: Standard deviation

randomized, placebo-controlled, clinical trial in the treatment of depressive episodes with homoeopathy was not feasible, owing to recruitment difficulties.[16] As the present study was not a randomized controlled trial, it did not encounter such difficulties. In this context, we look forward to the results from a placebo-controlled four-armed trial by Adler *et al*.[17]

The objective to prevent the progression to bipolar disorder was achieved in all participants. Preventing the relapse of the condition was achieved in all, but one patient, who continued to suffer till nine months. Prescribing homoeopathic medicines based on proper repertorisation and individualisation of the patients, with repetition of medicines when necessary, was determined as a useful strategy for the management of different intensities of depressive disorders.

The study was an uncontrolled study and stood weaker than the controlled trials on the strength of evidence. Hence, further explorations of this subject need larger studies, with better methodological adaptations (placebo-controlled, randomized, clinical trials), if feasible. However, this study may be considered a step forward in the direction of evidence-based homoeopathic treatment of depression.

CONCLUSION

A course of six months of Homoeopathic treatment is associated with significant benefits in patients suffering from depressive episodes, as measured by HDRS. Further studies should be controlled to assess the efficacy.

ACKNOWLEDGMENT

REFERENCES

1. Akiskal HA. Historical Introduction and Conceptual Overview. In: Sadock BJ, Sadock VA, Ruiz P, editors. The Comprehensive Textbook of Psychiatry, Vol. 1, 9th ed. Philadelphia: Lippincott Williams and Wilkins; 2009. p. 1629-31.
2. International Statistical Classification of Diseases and Related Health Problems (ICD-10). Tenth Revision, Vol. 1. Geneva: World Health Organization; 1992. p. 335-6.
3. Reus VI. Mental Disorders. In: Fauci AS, Braunwald E, Kasper DL, Longo DL, Hauser SL, Jameson JL, et al., editors. Harrison's Principles of Internal Medicine, 17th ed. Noida, India: Tata McGraw Hill Companies, Inc.; 2008. p. 2715-6.
4. Grover S, Dutt A, Avasthi A. An overview of Indian research in depression. Indian J Psychiatry 2010;52(Suppl 1):S178-88.
5. Luppino FS, de Wit LM, Bouvy PF, Stijnen T, Cuijpers P, Penninx BW, et al. Overweight, obesity, and depression: A systematic review and meta-analysis of longitudinal studies. Arch Gen Psychiatry 2010;67:220-9.
6. Davidson JR, Zhang W. Treatment of post-stroke depression with antidepressants. J Alt Complement Med 2008;14:795-6.
7. Narasimhan M, Campbell N. A tale of two comorbidities: Understanding the neurobiology of depression and pain. Indian J Psychiatry 2010;52:127-30.
8. Looper K, Mustafa S, Zelkowitz P, Purden M, Baron M. McGill Early Arthritis Research Group. History of depressive episodes as a risk factor for illness severity in early inflammatory arthritis. J Psychosom Res 2011;71:28-31.
9. Srinivasan K. "Blues" ain't good for the heart. Indian J Psychiatry 2011;53 (3):192-3.
10. Rush AJ, Nierenberg AA. Mood disorders: Treatment of depression. In: Sadock BJ, Sadock VA, Ruiz P, editors. The Comprehensive Textbook of Psychiatry. Vol. 1, 9th ed. Philadelphia: Lippincott Williams and Wilkins; 2009. p. 1734.
11. Makich L, Hussain R, Humphries JH. Management of depression by homoeopathic practitioners in Sydney, Australia. Complement Ther Med 2007;15:199-206.
12. Pilkington K, Rampes H, Richardson J. Complementary Medicine for Depression. Expert Rev Neurother 2006;6:1741-51.
13. Pilkington K, Kirkwood G, Rampes H, Fisher P, Richardson J. Homoeopathy for depression: A systematic review of the research evidence. Homoeopathy 2005;94:153-63.
14. Davidson JR, Crawford C, Ives JA, Jonas WB. Homoeopathic treatments in psychiatry: A systematic review of randomized placebo: Controlled studies. J Clin Psychiatry 2011;72:795-805.
15. Adler UC, Paiva NM, Cesar AT, Adler MS, Molina A, Padula AE, et al. Homoeopathic individualized q-potencies versus Fluoxetine for moderate to severe depression: Double-blind, randomized non-inferiority trial. Evid Based Complement Alternat Med 2011;2011:520182.
16. Katz T, Fisher P, Katz A, Davidson J, Feder G. The feasibility of a randomised, placebo-controlled clinical trial of homoeopathic treatment of depression in general practice. Homoeopathy 2005;94:145-52.
17. Adler UC, Kruger S, Teut M, Ludtke R, Bartsch I, Schutzler L, et al. Homoeopathy for depression: DEP-HOM: Study protocol for a randomized, partially double-blind, placebo controlled, four armed study. Trials 2011;12:43.
18. Davidson JR, Morrison RM, Shore J, Davidson RT, Bedayn G. Homoeopathic treatment of depression and anxiety. Altern Ther Health Med 1997;3:46-9.
19. Mathie RT, Robinson TW. Outcomes from Homoeopathic prescribing in medical practice: A prospective, research-targeted, pilot study. Homoeopathy 2006;95:199-205.
20. Nair KRJ, Gopinadhan S, Pramanik MS, Shaw R, Balachandran VA, Kurup TN, et al. Behavioural disorders. Clinical research studies, series I. New Delhi: Central Council for Research in Homoeopathy;

2008. p. 1-14.

21. World Medical Association Declaration of Helsinki -Ethical Principles for Medical Research Involving Human Subjects. Available from: http://www.who.int/bulletin/archives/79 (4) 373.pdf [Last accessed on 2005 Aug 08].

22. Good Clinical Practices for Clinical Research in India. Available from: http://cdsco.nic.in/html/GCP1.html [Last accessed on 2009 Mar 12].

23. W.H.O., ICD-10, Classification of Mental and Behavioural Disorder, Clinical descriptions and diagnostic guidelines. 10th revised ed. Geneva: World Health Organization; 1992; F32-F32.9 p. 119-25.

24. Day S, Dictionary for Clinical trial, 2nd ed. England: John Wiley and Son Ltd; 2007. p. 188.

25. Hahnemann S. Organon of Medicine, 5th and 6th ed. New Delhi, India: B. Jain Publishers (P) Ltd.; 2010 (26th impression) p. 373-83.

26. Kent JT. Lectures on Homoeopathic Philosophy, 1st paperbacks ed. 1900. Wellingborough, Northamptonshire: Thorsons Publishers Ltd.; 1979. p. 235-41.

27. Pampallona S, Bollini P, Tibaldi G, Kupelnick B, Munizza C. Patient adherence in the treatment of depression. Br J Psychiatry 2002;180:104-9.

28. Lorant V, Deliège D, Eaton W, Robert A, Philippot P, Ansseau M. Socioeconomic inequalities in depression: A meta-analysis. Am J Epidemiol 2003;157:98-112.

29. Sareen J, Afifi TO, McMillan KA, Asmundson GJ. Relationship between household income and mental disorders: Findings from a population-based longitudinal study. Arch Gen Psychiatry 2011;68:419-27.

30. Muntaner C, Eaton WW, Miech R, O'Campo P. Socioeconomic position and major mental disorders. Epidemiol Rev 2004;26:53-62.

31. Culbertston FM. Depression and gender: An international review. Am Psychol 1997;52:25-31.

32. Addis ME. Gender and depression in men. Clin Psychol Sci Pract 2008;15:153-68.

33. Nayak C, Singh V, Singh K, Singh H, Gupta J, Lamba CD, *et al.* Management of distress during climacteric years by homoeopathic therapy. J Altern Complement Med 2011;17:1037-42.

34. Linde K, Clausius N, Ramirez G, Melchart D, Eitel F, Hedges LV, *et al.* Are the clinical effects of Homoeopathy placebo effects? A meta-analysis of placebo- controlled trials. Lancet 1997;350:834-43.

35. Shang A, Huwiler-Müntener K, Nartey L, Jüni P, Dörig S, Sterne JA, *et al.* Are the clinical effects of homoeopathy placebo effects? Comparative study of placebo-controlled trials of homoeopathy and allopathy. Lancet 2005;366:726-32.

अवसादग्रस्तता एपिसोड के प्रबंधन में होम्योपैथिक औषधियां

उद्देश्य: अवसादग्रस्तता एपिसोड के प्रबंधन में होम्योपैथिक औषधियों की भूमिका का मूल्यांकन।

सामग्री एवं विधि: केन्द्रीय होम्योपैथी अनुसंधान परिषद् (सीसीआरएच), द्वारा एक भावी, गैर तुलनात्मक, खुले—लेबल अवलोकन अध्ययन को अपने ही एक संस्थान— केन्द्रीय अनुसंधान संस्थान, कोट्टायम में अक्तूबर 2005 से सितम्बर 2010 तक आयोजित किया गया। मनोदशा विकारों से पीड़ित मरीज़ जो 20—60 उम्र के थे उनको शामिल करने और अपवर्जन मानदण्ड के लिए जांच की गई। मेटिरिया मेडिका के साथ परामर्श में रेपर्ट्राईजिंग के बाद, 30, 200 और 1000 पोटेंसी की होम्योपैथिक औषधियां निर्धारित की गई। अंतर्राष्ट्रीय स्तर पर स्वीकार किये गये पैमाने— हैमिल्टन अवसाद रेटिंग पैमाना (एचडीआरएस), बेक अवसाद सूची (बीडीआई) और नैदानिक ग्लोबल इम्प्रैशन (सीजीआई) को प्रत्येक बार लक्षणों का मूल्यांकन और परिणाम को मापने के लिए इस्तेमाल किया गया। 12 महीने के अनुवर्तन काल में निरीक्षण अवधि के 6 महीने सम्मिलित थे। एसपीएसएस संस्करण 20 के इलाज के इरादे से सिद्धांत के अनुसार विश्लेषण किया गया।

परिणाम: अध्ययन में 83 मरीजों (35 पुरुषों और 48 महिलाओं), जिनको समावेश/अपवर्जन मानदण्ड के लिए नामांकित किया गया, को शामिल किया गया। इनमें से 67 मरीजों ने इसको पूरा किया, 16 मरीज अवधि से अलग बाह्य रोगी विभाग (ओपीडी) में उपस्थित नहीं हुए। उनकी पिछली टिप्पणियों पर विश्लेषण के लिए ईलाज के इरादे से सिद्धांत का प्रयोग किया गया। टी—टेस्ट के उपयोग से एचडीआरएस के औसत स्कोर में एक महत्वपूर्ण सांख्यिकीय (पी=0.0001, पी < 0.05) अन्तर का अवलोकन किया गया। बेसलाईन और अंतिम लाईन पर औसत स्कोर क्रमशः17.98±4.9 और 5.8±5.9 थे। बीडीआई और सीजीआई पैमाने में भी महत्वपूर्ण सांख्यिकीय अन्तरों का अवलोकन किया गया। सबसे अधिक उपयोग की गई औषधियां थी: नेट्रम म्यूरियटिकम, (एन=18), आर्सेनिक अल्बम (एन=12), पल्साटिला निगरिकेन्स (एन=11), लाइकोपोडियम क्लावेटम (एन=7) और फास्फोरस (एन=6)

निष्कर्ष: एचडीआरएस द्वारा मापन के रूप में अवसादग्रस्तता एपिसोड से पीड़ित रोगियों में होम्योपैथिक उपचार का 6 महीने का कोर्स महत्वपूर्ण लाभ पहुँचाता है। प्रभावकारिता का आकलन करने के लिए नियंत्रित अध्ययन किये जाने चाहिए।

खोजशब्द: आर्सेनिक अल्बम, अवसादग्रस्तता एपिसोड, होम्योपैथी, भारत, लाइकोपोडियम क्लावेटम, नेट्रम मियूरियटिकम, प्रेक्षण अवधि, खुला परीक्षण, फास्फोरस, पल्साटिला निगरिकेन्स