### **ORIGINAL ARTICLE**

## Homoeopathic management of Schizophrenia: A prospective, non-comparative, open-label observational study

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#### ABSTRACT

**Objectives:** To evaluate the usefulness of homoeopathic intervention in Schizophrenia, in untreated cases and antipsychotic treatment resistant cases, to verify indications of medicines, and to assess relapse, if any.

**Materials and Methods:** A prospective, non-comparative, open-label observational study was carried out from October 2005–September 2010 by CCRH at Central Research Institute (H), Kottayam, Kerala, India. Patients between 20 and 60 years of age, presenting with symptoms of Schizophrenia were screened for inclusion and exclusion criteria. The patients who were on antipsychotic drugs were allowed to continue the same along with homoeopathic medicine, the dose of antipsychotics was monitored by the Psychiatrist. The symptoms of each patient were repertorized, and medicine was initially prescribed in 30C potency after consulting Materia Medica. Patients were followed up for 12 months. Outcome of treatment was assessed with Brief Psychiatric Rating Scales (BPRS). Analysis was done using Statistical Package for the Social Sciences SPSS Version 20.0.

**Results:** Out of 188 enrolled patients, 17 cases did not complete the baseline information. Total 171 patients were analysed as per modified Intention to Treat Principle. Significant difference (P = 0.0001, P < 0.05) in the mean scores of BPRS, using paired *t* test was observed at end of the study. *Sulphur, Lycopodium, Natrum muriaticum, Pulsatilla* and *Phosphorus* were found to be the most useful medicines in treating schizophrenic patients.

**Conclusion:** The study reflects the positive role of homoeopathic medicines in the management of patients suffering from schizophrenia as measured by BPRS.

**Keywords:** Brief Psychiatric Rating Scale, Homoeopathy, *Lycopodium clavatum, Natrum muriaticum, Phosphorus, Pulsatilla nigricans,* Schizophrenia, *Sulphur* 

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How to cite this article: Oberai P, Gopinadhan S, Sharma A,

Nayak C, Gautam K. Homoeopathic management of Schizophrenia:

A prospective, non-comparative, open-label observational study.

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Indian J Res Homoeopathy 2016;10:108-18.



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**Received:** 20-06-2014 **Accepted:** 04-05-2016

I J R H

#### INTRODUCTION

The schizophrenic disorders are characterized in general by fundamental and characteristic distortions of thinking and perception. The most important psychopathological phenomena include thought echo; thought insertion or withdrawal; thought broadcasting; delusions of control; hallucinatory voices; and thought disorders and negative symptoms.<sup>[1]</sup> The World Health Organizations global burden of disease estimates of 2011,<sup>[2]</sup> indicate that schizophrenia is the 17<sup>th</sup> leading cause of years lived with disability as compared to being 19<sup>th</sup> in the year 2000. According to the WHO Mental Health Gap Action Programme in India, the prevalence rate is 200 cases per 100,000 people for schizophrenia.<sup>[3]</sup> A report by the World Federation for Mental Health in 2008 signified that about 60-70% of patients relapse within 1-year without maintenance treatment,<sup>[4]</sup> which is a major issue of concern for the society as it affects the overall growth of a person and society and hence of a country.

Timothy and David have recommended in their report that "though medication is a vital part of treatment for most people with schizophrenia but it can be complemented by many of the other options such as traditional and alternative treatment in most people with schizophrenia."<sup>[5]</sup> Homoeopathy can be a useful treatment option in psychiatric cases as it treats patient holistically taking mind and body into account. Moreover, Homoeopathy is being known for having no side effect,<sup>[6]</sup> it can be a preference for the patients of schizophrenia.

In an observational study conducted by CCRH from 1984 to 2005<sup>[7,8]</sup> at CRI (H), Kottayam, Kerala, India, on 4179 patients with different types of behavioral disorders, it was found that 785 were schizophrenic. Accordingly, the current study was planned on a scientific protocol with definite outcome parameters, which are internationally accepted.

The primary objectives of the study were (a) to evaluate the usefulness of Homoeopathic therapeutic intervention in "schizophrenia," (b) role of homoeopathic therapy in the untreated cases of schizophrenia. Secondary objectives were (a) to assess advantage of homoeopathic therapeutic intervention in antipsychotic treatment resistant cases, (b) verify the prominent indications of the remedies, and (c) to assess relapse, if any.

#### **MATERIALS AND METHODS**

#### Setting and Design

The study was prospective, non-comparative, open-label observational in which the patients having symptoms of schizophrenia were screened from the outpatient department of CRI (H), Kottayam, Kerala, India, during October 2005-September 2010. The treating physicians or investigators were registered homoeopathic practitioners and had more than 10 years of clinical experience. The study protocol was in accordance with the Helsinki<sup>[9]</sup> Declaration on human experimentation and Good Clinical Practices for Clinical Research in India.<sup>[10]</sup> Each patient who presented with symptoms of schizophrenia was confirmed and assessed by psychiatrist at baseline and during follow-ups. As guided by the psychiatrist engaged in the study, patients who showed "inadequate response to at least two 3<sup>rd</sup> generation antipsychotic drugs at the maximally tolerated dose within the recommended therapeutic range lasting 3 weeks" were considered as treatment resistant cases. Patients who had not taken antipsychotic treatment for the disease prior to enrolment were considered as "untreated cases." The patients were admitted in the inpatient department of the same institute for 2–3 months and in the case of acute exacerbation or as and when required. The patients who were on antipsychotic drugs were allowed to continue the same along with homoeopathic medicines, and the dose of the same was monitored by the psychiatrist; however, others were prescribed homoeopathic medicines only as guided by the psychiatrist. Ethical clearance was obtained from the Ethical Committee, and the protocol was approved by the Scientific Advisory Committee. A prior training was given to the investigators regarding the study protocol. The study was funded by CCRH, Ministry of AYUSH, Government of India. All the patients were assessed for severity of illness using the 18 points brief psychiatric rating scale (BPRS) and Clinical Global Impression (CGI) scale. The assessment was done at baseline, 3<sup>rd</sup>, 6<sup>th</sup>, 9<sup>th</sup> and 12<sup>th</sup> month to validate the changes in the BPRS score in comparison to baseline review.

#### **Participants**

Patients of both sexes presenting the symptoms of schizophrenia (as per the definition of International

Statistical Classification of Diseases-10) were screened as per the inclusion/exclusion criteria mentioned below.

#### **Inclusion Criteria**

- Patients of both sexes between 20 and 60 years age diagnosed to be schizophrenic
- The diagnosed patients who are resistant to psychotropic drugs or with <50% improvement
- The diagnosed patients' gave written informed consent.

#### **Exclusion Criteria**

- Schizophrenia cases well-managed with psychotropic drugs
- H/o symptomatic schizophrenia due to temporal lobe epilepsy, encephalitis, amphetamine abuse, alcohol, and substance abuse
- Schizophrenics with suicidal and homicidal tendencies
- Patients with delusional disorders
- Mental retarded patients
- Patients with organic psychosis
- Patients with space occupying lesion in brain
- Cases with life-threatening medical condition.

#### Intervention

After enrollment, an indepth interview with the patients and their guardians was conducted according to Homoeopathic principles and was recorded in a case recording proforma. After complete case taking, repertorization was done on the basis of the totality of symptoms. Final prescription was based on the individualization of the patient, after consulting Materia Medica.

The initial prescription of the selected medicine was made in 30CH potency, in a single dose (4 pills of globule No. 30) followed by placebo (4 pills of unmedicated globules No. 30). The follow-up was done monthly for 12 months through scheduled visits, to monitor the condition of the patient by using the BPRS, to record the changes in behavior and relapse of the symptoms, if any. Compliance of instructions and adherence to the prescribed therapeutic schedule was affirmed. However, patients were free to report at any time during adverse events or emergency situations. On each of these visits, total clinical assessment was done by both the investigator and the psychiatrist. In case of any event of emergency condition, i.e., worsening of complaints, patients were referred for other medical care. Response of the prescribed medicine was assessed, and further treatment was done as per the guidelines prescribed by Dr. Hahnemann<sup>[11]</sup> and Dr. Kent.<sup>[12]</sup> Medicine was repeated depending on the frequency, intensity, and duration of the symptoms, till perceptible change appeared (improvement in signs or symptom, appearance of new symptom, worsening of sign and symptom. Appearance of any change was immediately followed by placebo/ change in potency/change in remedy, depending upon response. In cases where no signs of improvement noticed, potency was raised. Even if no change was observed, re-analysis of the case was done. In case of acute exacerbation of symptoms or appearance of any other acute disease condition, the medicine selected was either a continuation of the preselected medicine, or one of the better-indicated medicines case was retaken to make further prescription. This medicine was prescribed repeatedly as per the intensity of the acute exacerbation. If in case the condition of the patient deteriorated, it was referred for conventional or other treatment.

#### **Outcome Measures**

BPRS, the most widely used rating scale in psychiatry compring of 18 items rated 0 (not present) to 7 (extremely severe), was used to verify the status at baseline and each follow-up visits. The outcome was evaluated on the basis of change in the BPRS Scores. Change was calculated using formula: [Baseline score–score at end]/base line score ×100. Changes were graded as follows: Marked improvement (75 to <100%), moderate improvement (50 to <75%), mild improvement (25 to <50%), not significant (<25%), not improved (no change in score), and worse (increase in score).

CGI scale was used to measure the intensity of disease (range from 1 to 7). The "severity of illness" and "global improvement" were assessed at baseline and at each follow-up visits.

#### **Statistical Analysis**

Statistical analysis was done using SPSS software Version 20.0. Repeated measures ANOVA test was used to compare the changes in total BPRS scores at various time points during the study. Non-parametric tests were used for ordinal data. Friedman & McNemar test was used for data analysis of each symptom and a P < 0.05 was considered as significant. The analysis of the outcomes as compared to the baseline values was done as per "intention to treat (ITT)" with last observation carried forward for 66 cases with irregular follow-ups.

#### RESULTS

Out of 427 screened, a total of 188 patients who fulfilled inclusion and exclusion criteria were enrolled. Of these 17 cases did not complete the baseline information. 105 cases completed the follow-up of 12 months as per the protocol whereas 66 cases visited for varied time period during 12 months. The detail of patients enrolled is depicted in Figure 1.

Among the enrolled cases, schizophrenia was found to be prominent in males (63.2%, n = 108), single (60.8%, n = 104), and age group 20 and 40 years, (76.6%, n = 131), with positive family history (61.4%, n = 105). It was found that most of the patients were educated up to  $10^{\text{th}}$  class (43.9%, n = 75), unemployed (36.3%, n = 62), businessman (26.9%, n = 46), and laborers (22.8%, n = 39). The mean duration of suffering was 10.6  $\pm$  7.3 years. 61.4% (*n* = 105) patients were having family history of schizophrenia. At the baseline, there were 16.4% (n = 28) patients presented with acute exacerbation whereas 83.6% (n = 143) came in their chronic states. There were 85.6% (n = 147) patients on conventional

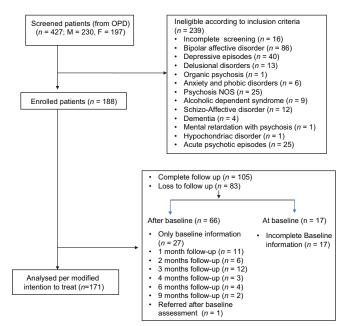


Figure 1: Flow chart depicting inflow of patients

antipsychotic treatment, 5 were on homoeopathic treatment, 19 had taken no treatment prior enrollment, 19.0% (n = 28) were resistant to them. The baseline information is given in Table 1.

Friedman's tests by using Bonferroni correction for multiple testing showed statistically significant result (P < 0.05) in individual symptom of BPRS at the end of the treatment [Table 2]. Assessment of individual symptom and overall change in BPRS at the end of the treatment using McNemar test also showed significant result [Table 3].

Nineteen patients had schizophrenia of mild intensity, 96 moderate, and 56 of severe intensity according to BPRS scores at baseline. However, after treatment, 67.8% (n = 116) patients shifted to mild intensity, 17.5% (n = 30) to moderate, and only 14.62% (n = 25) were of severe intensity. Five patients became non-schizophrenic, i.e., BPRS score fell below 10, which is depicted in Table 4.

As guided by the psychiatrist engaged in the study out of 147 patients, who were taking antipsychotic treatment prior to enrollment, 79 were prescribed antipsychotic drugs along with homoeopathic medicine and 68 were prescribed homoeopathic medicines only. Patients who were on antipsychotic drugs along with homoeopathic medicines showed marked (19.0%, n = 15) to moderate (27.8%, n = 22) improvement while who were on homoeopathic medicines alone, showed moderate (26.1%, n = 24) to marked (13.0%, n = 12) improvement. The outcome status is reflected in Figure 2. Out of 28 patients who were treatment resistant, 4 improved markedly, 12 moderately, 8 mildly, 3 not significant, and 1 patient was static. Out of 19 untreated cases, 3 showed marked, 5 showed moderate, 4 showed mild, and 2 showed non-significant improvement whereas 5 were static.

Out of 105 patients who had completed 12 months follow-up as per the protocol, 90 patients required change in prescription.

Thirteen remedies were most commonly indicated and found useful in treating schizophrenic patients. Of these *Sulphur* (22.8%, n = 39), *Lycopodium clavatum* (21.1%, n = 36), *Natrum muriaticum* (15.8%, n = 27), *Pulsatilla nigricans* (8.2%, n = 14), and *Phosphorus* (7.0%, n = 12) were chiefly indicated and showed varying degree of improvement. These five medicines were administered to 128 patients (74.8%) patients out

Table 1: Baseline characteri	stics of study
population	

population	N. S. L. M. M.
Characteristics	Number of cases, <i>n</i> (%)
Sex	
Male	108 (63.2)
Female	63 (36.8)
Marital status	
Married	57 (33.3)
Single	104 (60.8)
Divorcee	10 (5.8)
Age group (years) 33.5±8.9	
20-30	71 (41.5)
31-40	60 (35.1)
41-50	29 (17.0)
51-60	11 (6.4)
Duration of complaints (years) 10.6±7.3	
1-10	99 (57.9)
11-20	53 (31.0)
21 and above	19 (11.1)
Occupation	
Businessmen	46 (26.9)
Housewives	1 (0.6)
Laborers	39 (22.8)
Private job	8 (4.7)
Professionals	6 (3.5)
Students	9 (5.3)
Unemployed	62 (36.3)
Family history	
Present	105 (61.4)
Not present	66 (38.6)
Education status	
Below 10 <sup>th</sup> class	75 (43.9)
Up to 10 <sup>th</sup> class	48 (28.1)
Plus two	21 (12.3)
Diploma	8 (4.7)
Graduation	12 (7.0)
Postgraduation	6 (3.5)
Not mentioned	1 (0.6)
Presentation	
Acute	28 (16.4)
Chronic	143 (83.6)
Symptoms	
Somatic concern	80 (46.8), 0 (0-2)
Anxiety	59 (34.5), 0 (0-2)
Emotional withdrawal	167 (97.7), 3 (3-3)
Depressive mood	24 (14.0), 0 (0-0)
Guilt feeling	8 (4.7), 0 (0-0)
Hostility	168 (98.2), 3 (2-3)
Grandiosity	41 (24.0), 0 (0-0)
Suspiciousness	167 (97.7), 3 (3-4)
Hallucination	168 (98.2), 3 (3-4)
Unusual thought content	150 (87.7), 2 (2-3)
-	Contd

Contd...

Table 1: Contd	
Characteristics	Number of cases, <i>n</i> (%)
Disorientation	5 (2.9), 0 (0-0)
Conceptual disorganization	90 (52.6), 1 (0-2)
Blunt affect	158 (92.4), 3 (2-3)
Motor retardation	121 (70.8), 2 (0-2)
Tension	56 (32.7), 0 (0-1)
Uncooperativeness	161 (94.2), 3 (2-3)
Excitement	45 (26.3), 0 (0-1)
Mannerisms	98 (57.3), 1 (0-2)

Values are presented in n (%), mean±SD and median (Q1, Q3). SD: Standard deviation

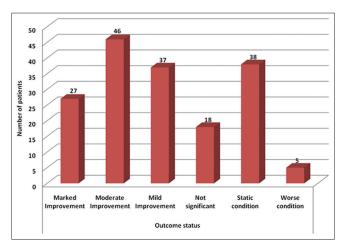


Figure 2: Outcome status of study population

of 171 enrolled. Medicines and their indications in the study patients are depicted in Table 5.

Out of 74.8% (n = 128) patients who suffered continually throughout the year at baseline, only 38.0% (n = 29) were of same status after treatment. There were overall 29 relapses in all the patients with median 7 (7–7) before treatment and after treatment the overall relapses reduced to 17, 2 (1–7). 23.3% (n = 40) patients had no relapse in 1 year follow-up [Table 6]. Five cases were required to admit during relapse (acute exacerbations). Medicines found useful during relapse were *Arsenicum album*, *Belladonna*, *Hyoscyamus niger*, *Lycopodium clavatum*, *Nux vomica*, *Phosphorus*, and *Stramonium*.

The antipsychotic drugs viz., chlorpromazine, clozapine, haloperidol, lorazepam, olanzapine, quetiapine fumarate, risperidone, sertraline, and valporate chrono advised by the psychiatrist were prescribed singly or in varied combinations in few patients. The dosage of these was tapered in nine patients and withdrawn in 17 patients as per discretion of treating psychiatrist. The details of these are depicted in Table 7.

Table 2: Compariso	n of brief ps	ychiatric rat	ing scale sco	ore at 3 <sup>rd</sup> , 6 <sup>th</sup> ,	9 <sup>th</sup> , and 12 <sup>th</sup> r	nonth	۱	
Symptoms	Baseline (n)	3 months ( <i>n</i> )	6 months ( <i>n</i> )	9 months ( <i>n</i> )	12 months ( <i>n</i> )	χ²	Ρ	Wilk's lambda
Somatic concern	0 (0-2)	0 (0-1)	0 (0-1)	0 (0-1)	0 (0-1)	45.3	0.001*	
Anxiety	0 (0-2)	0 (0-1)	0 (0-1)	0 (0-1)	0 (0-1)	13.1	0.011*	
Emotional withdrawal	3 (3-3)	2 (2-3)	2 (2-3)	2 (1-3)	2 (1-3)	152.7	0.001*	
Depressive mood	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	21.5	0.001*	
Guilt feeling	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	4.6	0.325	
Hostility	3 (2-3)	2 (1-3)	2 (1-3)	2 (1-3)	2 (1-3)	162.2	0.001*	
Grandiosity	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	23.4	0.001*	
Suspiciousness	3 (3-4)	2 (2-3)	2 (1-3)	2 (1-3)	2 (1-3)	177.4	0.001*	
Hallucination	3 (3-4)	2 (1-3)	2 (0-3)	2 (0-3)	2 (0-3)	226.2	0.001*	
Unusual thought content	2 (2-3)	2 (0-3)	1 (0-2)	1 (0-2)	0 (0-2)	171.9	0.001*	
Disorientation	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	4.7	0.321	
Conceptual disorganization	1 (0-2)	0 (0-2)	0 (0-2)	0 (0-2)	0 (0-1)	79.9	0.001*	
Blunt affect	3 (2-3)	2 (1-3)	2 (1-3)	2 (1-3)	2 (1-3)	72.3	0.001*	
Motor retardation	2 (0-2)	1 (0-2)	0 (0-2)	1 (0-2)	1 (0-2)	67.2	0.001*	
Tension	0 (0-1)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	50.8	0.001*	
Uncooperativeness	3 (2-3)	2 (1-3)	2 (1-3)	2 (1-3)	2 (1-2)	99.1	0.001*	
Excitement	0 (0-1)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	26.5	0.001*	
Mannerisms	1 (0-2)	0 (0-2)	0 (0-2)	0 (0-2)	0 (0-2)	62.4	0.001*	
BPRS mean (SD)	27.6 (7.4)	19.2 (9.9)	18.5 (9.9)	17.9 (10.0)	16.6 (10.1)	-	0.001	0.43

\*Friedman's test, statistically significant at P<0.05 by using Bonferroni correction for multiple testing. BPRS: Brief psychiatric rating scale; SD: Standard deviation

Table 3: Assessment of individual symptom atthe end of the treatment									
Symptoms	Improved ( <i>n</i> )	Worse ( <i>n</i> )	Static ( <i>n</i> )	Р					
Somatic concern	38	18	115	0.01					
Anxiety	20	11	140	0.15					
Emotional withdrawal	61	2	108	0.001					
Depressive mood	6	1	164	0.125					
Guilt feeling	4	167	0	0.125					
Hostility	59	2	110	0.001					
Grandiosity	17	10	144	0.248					
Suspiciousness	59	3	109	0.001					
Hallucination	52	0	119	0.001					
Unusual thought content	44	2	125	0.001					
Disorientation	2	0	169	0.5					
Conceptual disorganization	30	10	131	0.002					
Blunt affect	75	7	89	0.001					
Motor retardation	41	10	120	0.001					
Tension	12	5	154	0.143					
Uncooperativeness	62	4	105	0.001					
Excitement	13	7	151	0.263					
Mannerisms	36	12	123	0.001					

\*McNemar test, only discordant cells are used for data analysis. Accordingly, improved and worsened patients have been considered for analysis. Not significant  $P=\ge 0.05$ 

#### **DISCUSSION**

Though Homoeopathy has been found useful for the patients of schizophrenia over the years, however,

rating scale score) before and after treatment Intensity Number of patients ( <i>n</i> )									
at baseline	Baseline	12 ו	months, <i>n</i>	(%)					
	( <i>n</i> )	Mild	Moderate	Severe					
Mild (BPRS=10-20)	19	18 (94.7)	0 (0.0)	1 (5.2)	0.001				
Moderate (BPRS=21-30)	96	76 (79.1)	20 (20.8)	0 (0.0)					
Severe (BPRS >30)	56	22 (39.2)	10 (17.8)	24 (42.8)					
Total	171	116 (67.8)	30 (17.5)	25 (14.6)					

BPRS: Brief psychiatric rating scale

scientific evidence is lacking. In the earlier study of CCRH,<sup>[7]</sup> scientific tools were missing; hence, the present study outcome assessment was based on internationally accepted scales for schizophrenic patients. During the trial, it was observed that maximum patients were in the age group of 20–40 years which goes with the prevalence report of the World Health Report 2001.<sup>[2]</sup> It is also consistent with the study by Nyer *et al.*,<sup>[13]</sup> wherein they have observed schizophrenia prominent among singles whereas it is not consistent with the study of Rudaleviciene *et al.*<sup>[14]</sup> where schizophrenia was observed in higher than secondary education.

Most of the patients of schizophrenia often report relapse, and it occurs soon after the withdrawal of

Name of	ledicines fou Total number		Impr	ovement stat	n(%)			Indications#
medicines*	of patients	Marked	Moderate	Mild	Not	Static	Worse	maications
	prescribed (n)		improvement	improvement		condition	condition	
Arsenicum album	8	3 (37.5)	2 (25.0)	2 (25.0)	1 (12.5)	0 (0.0)	0 (0.0)	Overanxious Indifference Easily irritable Fear of death Fearful to be alone Restlessness Hurried activities
Belladonna	6	2 (33.3)	0 (0.0)	2 (33.3)	0 (0.0)	2 (33.3)	0 (0.0)	Violent behavior Destructive Tendency to hurt Sensitive to noise
Calcarea carb	5	0 (0.0)	1 (20.0)	0 (0.0)	2 (40.0)	2 (40.0)	0 (0.0)	Profuse perspiration Timidity Mildness Obesity Chilly patient Late learning to walk Indolence Desires egg Aversion to meat Difficult in comprehensior
Lycopodium clavatum	36	9 (25.0)	11 (30.5)	3 (8.33)	2 (5.56)	10 (27.7)	1 (2.7)	Fear to be alone Greedy Irritable on contradiction Complaints from fright Fear when alone
Natrum muriaticum	27	5 (18.5)	8 (29.6)	7 (25.9)	4 (14.8)	3 (11.1)	0 (0.0)	Weeping easily Ailments from grief Eats well-yet loses flesh Irritable on contradiction Thinking about past unpleasant things Weeps easily Consolation aggravates Reserved Craves salt
Nux vomica	6	1 (16.6)	1 (16.6)	0 (0.0)	2 (33.3)	2 (33.3)	0 (0.0)	Quarrelsome Irritable Critical Craves smoking Complaints from fright
Phosphorus	12	0 (0.0)	6 (50.0)	4 (33.3)	0 (0.0)	2 (16.6)	0 (0.0)	Fear of being alone Desires cold drinks Fear of death Indifferent Desires salt Increased sexual desire Irritability
Pulsatilla nigricans	14	3 (21.4)	3 (21.4)	3 (21.4)	2 (14.2)	2 (14.2)	1 (7.14)	Mildness Ailments since puberty Weeping easily Mood change Tossing during sleep Fear in the evening Religious Consolation amelioration Aversion to fat Desires open air

Contd...

Table 5: C	Contd							
Name of	Total number		Imp	rovement sta	tus, <i>n</i> (%)			Indications#
medicines*	of patients prescribed ( <i>n</i> )	Marked improvement	Moderate improvement	Mild improvemen	Not t significant	Static t condition	Worse condition	
Sepia	1	0 (0.0)	1 (100.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	Anger on contradiction Indolence Indifference Hot flushes
Stramonium	7	1 (14.2)	1 (14.2)	1 (14.2)	2 (28.5)	2 (28.5)	0 (0.0)	Religious Talkative Fear of darkness Praying Tendency to hurt
Sulphur	39	3 (7.69)	12 (30.7)	14 (35.9)	3 (7.69)	6 (15.3)	1 (2.56)	Philosophical Indolence Religious Irritable Megalomaniac Indolent, Iazy Religious Aversion milk Aversion to bath Filthy skin Perspiration on palms soles Itching of skin Heat sensation Thirst extreme
Veratrum album	1	0 (0.0)	0 (0.0)	1 (100.0)	0 (0.0)	0 (0.0)	0 (0.0)	Abusive when irritable
Hyoscyamus	9					9 (100)		
Total	171	27	46	36	18	40	3	

\*First prescription; #Allen's key notes and Boericke's new manual of Homoeopathic Materia Medica with Repertory

Table 6: Frequency of relapses							
Frequency of relapse (s)	Number of patients (before treatment)	Number of patients (after treatment)					
No relapse, n (%)	0 (0.0)	40 (23.3)					
Relapse once in year, n (%)	7 (4.0)	32 (18.7)					
Relapse more than once in year, <i>n</i> (%)	6 (3.5)	5 (2.9)					
Continuous symptoms throughout year (s), <i>n</i> (%)	128 (74.8)	65 (38.0)					
Don't know, n (%)	30 (17.5)	29 (16.9)					
Total number of relapses reported in median Q2 (Q1, Q3)	29, 7 (7, 7)	17, 2 (1, 7)					

antipsychotic drugs.<sup>[15]</sup> A study on schizophrenia<sup>[16]</sup> demonstrated that in 34.7% patient's symptoms relapsed within 1 year. Another study by Millier *et al.*<sup>[17]</sup> demonstrated that symptoms relapsed in around 23.7% patients who were given monotherapy and 33.3% patients who were on polypharmacy within 1 year. However, in the present study, where patients were treated with homoeopathic medicines, relapse was found in 21.6% patients.

The homoeopathic medicines such as *Lycopodium clavatum*, *Pulsatilla nigricans*, and *Sulphur* were found to be most useful for schizophrenic patients in the present study which were also observed in the earlier studies on behavioral disorders.<sup>[7,8]</sup> The medicines found effective during relapse were *Arsenicum album*, *Belladonna*, *Hyoscyamus niger*, *Lycopodium clavatum*, *Nux vomica*, *Phosphorus*, and *Stramonium*. This laid the foundation for further exploration of these specific medicines in treating the patients of schizophrenia.

The reduction of dosage and withdrawal of antipsychotic drugs was observed in 9 and in 17 patients, respectively, over a period of 1 year which was encouraging. During the study, none of the patients showed any side effect which is generally observed in antipsychotic drugs.<sup>[18]</sup> This further justifies that it can be a good substitute of the antipsychotic drugs in the treatment of patients of schizophrenia as it does not cause any side effect<sup>[6,19]</sup> or drug resistance, which is usually observed in conventional treatment.

The present study had some limitations too. It was a non-comparative, open trial study; hence

		Antip	osychotic drugs					
Generic name of the drug*	At baseline		After 1	After 12 months treatment				
	Drugs given in total ( <i>n</i> ) number of patients	Reduction in the dosage in ( <i>n</i> ) number of patients	Increased in the dosage in ( <i>n</i> ) number of patients	Same dosage in ( <i>n</i> ) number of patients	Withdrawal of the drug in ( <i>n</i> ) number of patients	Change of the drug in ( <i>n</i> ) number of patients		
Chloropromazine	5	1	-	1	-	3		
Risperidone	8	3	-	2	1	2		
Haloperidol	7	2	-	1	1	3		
Sertraline	1	-	-	-	-	1		
Lorazepam	9	-	-	2	7	-		
Clozapine	11	2	3	2	1	3		
Olanzapine	6	-	-	1	5	1		
Amisulpride	2	1	-	1	-	-		
Quetiapine fumarate	1	-	-	-	1	-		
Valporate chrono	3	-	-	2	1	-		
Total	53	9	3	12	17	13		

\*More than one medicine was given in some patients

stands weaker than controlled trials on the strength of evidence. Further untreated cases of schizophrenia were less in number due to which statistical evaluation on untreated cases could not be ascertained. Hence, further explorations with placebo-controlled or conventional treatment controlled randomized design exclusively on untreated cases can be conducted to determine the efficacy of homoeopathic medicines in schizophrenia.

#### **CONCLUSION**

The study reflects the positive role of homoeopathic medicines in the management of patients suffering from schizophrenia as measured by BPRS. Randomized controlled trials are suggested to assess the efficacy of homoeopathic medicine in schizophrenia.

#### Acknowledgments

The authors are thankful to the Director General of CCRH, Dr. Raj K Manchanda, former Director Dr. Alok Kumar for providing technical co-operation and administrative support from time to time for conducting the study. We acknowledge Dr. Suresh Ninan, Consultant Psychiatrist for contribution in actively participating in guiding the prescription of antipsychotic drugs. Contributions of Dr. V. Roja, RO (H) and Mrs. Maya Padmanabhan for helping in the statistical analysis of the study and Mrs. Reshmi, CRI (H), Kottayam in helping in pre-analysis are acknowledged. We acknowledge the co-operation of the Officer-In charge

of the Institute and the patients enrolled in the study for their co-operation that provided an opportunity to probe the scope of homoeopathic medicines.

#### **Financial Support and Sponsorship**

Central Council for Research in Homoeopathy, 61–65, Institutional Area, Janakpuri, New Delhi 110058, India.

#### **Conflicts of Interest**

There are no conflicts of interest.

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#### विखंडित मनस्कताग्रस्त का होम्योपैथिक उपचारः एक भावी, अतुलनात्मक, खुला लेबल अवलोकनात्मक अध्ययन

**उद्देश्यः** विखंडित मनस्कताग्रस्त रोग में होम्योपैथिक उपचार की उपयोगिता अनुपचारित मामलों व मनोरोगरोधी दवाओं के प्रतिरोधी मामलों का मूल्यांकन करना।, उपयोगी दवाओं के लक्षणों को सत्यापित करना व रोग के पुनरावर्तन का आकलन करना।

विधिः एक भावी, अतुलनात्मक, खुले लेबल अवलोकनार्थ अध्ययन का आयोजन सीसीआरएच के द्वारा अक्टूबर 2005 से सितंबर 2010 के मध्य केन्द्रीय अनुसंधान संस्थान (होम्यो.) कोट्रायम में किया गया। विखंडित मनस्कताग्रस्त के लक्षणों के संग 20 से 60 वर्ष की आयु वर्ग के मरीजों की पड़ताल समावेशन और अपवर्जन मानको के आधार पर की गई। वे मरीज जो मनोरोगरोधी दवाइयों का सेवन कर रहे थे, उन्हें भी होम्योपैथिक औषधियों के संग उसे जारी रखने की अनुमति की गई और मनोरोगरोधी औषधि की खुराक की निगरानी मनोचिकित्सकों के द्वारा की गई। प्रत्येक रोगी के लक्षणों को रिपोर्ट किया गया और 30सी की क्षमता वाली औषधि को मैटेरिया मेडिका से परामर्श के उपरांत बताया गया। रोगियों के संग 12 महीनों तक संपर्क रखा गया। उपचार के परिणाम का आकलन ब्रीफ साइकिएट्रिक रेटिंग स्केल और विश्लेषण एसपीएस संस्करण 20 के प्रयोग के द्वारा किया गया।

परिणामः कुल 188 नामांकित मरीजों में से 105 ने 12 माह के अनुवर्तन काल को पूर्ण किया, 17 ने पूर्ण आधारभूत जानकारी नहीं दी और 66 मरीजों से विभिन्न समय अवधि में संपर्क स्थापित किया गया। 66 मरीजों पर अंतिम अवलोकन को संज्ञान में रखते हुए, कुल 171 रोगियों पर उपचार की मंशा सिद्धांत द्वारा विश्लेषण किया गया। बीपीआरएस के मीन अंकों में महत्वपूर्ण अंतर (पी=0.0001, पी < 0.05) को अध्ययन के अंत में अवलोकित किया गया। सल्फर, लाइकोपोडियम, नैट्रम म्यूर, पल्साटिला और फोस्फोरस विखंडित मनस्कताग्रस्त के मरीजों का उपचार करने के लिए सबसे ज्यादा प्रभावी पाईं गयी।

**निष्कर्षः** यह अध्ययन विखंडित मनस्कताग्रस्त से पीड़ित रोगियों के उपचार में होम्योपैथिक औषधियों की सकारात्मक भूमिका को प्रदर्शित करता है, जैसा बीपीआरएस के द्वारा मापा गया है। विखंडित मनस्कताग्रस्त में होम्योपैथिक औषधियों की कुशलता का आंकलन करने के लिए यादृच्छिक नियंत्रित प्रयोगों का सुझाव दिया जाता है।

# Tratamiento homeopático de la esquizofrenia: estudio observacional prospectivo, no comparativo, de diseño abierto RESUMEN

**Objetivo:** Evaluar la utilidad de la intervención homeopática en la esquizofrenia en casos no tratados, resistentes al tratamiento antipsicótico, e verificar las indicaciones de los medicamentos y para evaluar la recaída.

**Materiales y métodos:** El CCRH realizó un estudio observacional, prospectivo, no comparativo de diseño abierto desde octubre de 2005–septiembre de 2010 en el Central Research Institute (H), Kottayam, Kerala, India. Los pacientes entre 20 y 60 años de edad, con síntomas de esquizofrenia fueron examinados en cuanto a los criterios de inclusión y exclusión para ser incluidos. Los pacientes que estaban tomando fármacos antipsicóticos podían continuar con los mismos junto con el medicamento homeopático. El psiquiatra monitorizaba la dosis de los antipsicóticos. Los síntomas de cada paciente fueron repertorizados y el medicamento homeopático se prescribió a la potencia 30C después de consultar la Materia Medica. El seguimiento de los pacientes fue de hasta 12 meses. Los resultados del tratamiento se evaluó con: BPRS (brief psychiatric rating scale). Para el análisis se utilizó el paquete estadístico para ciencias sociales (Statistical Package for the Social sciences SPSS Version 20).

**Resultados:** De 188 los pacientes incluidos, 17 casos no se ha completado la información básica. El principio de intención-de-tratar se aplicó para realizar los análisis de 171 pacientes teniendo en cuenta la última observación realizada. Al final del estudio, se observó una diferencia significativa (P = 0,0001, P < 0,05) en las puntuaciones medias de la BPRS, aplicando el test t pareado. Se constató que *Sulphur, Natrum muriaticum, Pulsatilla nigricans* y *Phosphorus* fueron los medicamentos más eficaces en el tratamiento de pacientes con esquizofrenia.

**Conclusiones:** El estudio refleja el papel positivo de los medicamentos homeopáticos en el tratamiento de los pacientes con esquizofrenia, según lo medido en la BPRS. Hay que realizar ensayos controlados aleatorizados para evaluar la eficacia de los medicamentos homeopáticos en la esquizofrenia.