

Bronchial Asthma

A.K.Vichitra¹, S. R. Sharma², Bindu Sharma², K. Raju³, B. Indira³, E. C. Thomas³, T. N. S. Kurup³,
Papula Prasad³, G. C. Sahagal⁴, Bhawan Singh⁴ and D.M. Rao⁵

¹ Regional Research Institute (Homoeopathy), New Delhi.

² Regional Research Institute (Homoeopathy), Shimla.

³ Clinical Research Unit (Homoeopathy), Udupi, Karnataka.

⁴ Clinical Research Unit (Homoeopathy), Patiala, Punjab.

⁵ Regional Research Institute (Homoeopathy), Gudivada, Andhra Pradesh.

Objectives: The objectives of the study were to determine therapeutic efficacy of homoeopathic medicines in the management of bronchial asthma and to identify reliable indications of the effective medicines, their most useful potencies, frequency of administration and relationship with other medicines. The objectives also included determining the efficacy of homoeopathic medicines to alleviate acute exacerbation of asthma and to prevent further progression of disease by controlling recurrent attacks.

Methods: It was a multi-centric, observational, prospective study (Open clinical trial) carried out during the period 1978 – 2003. Out of 2641 bronchial asthma patients enrolled, 2107 patients were followed up regularly. During acute attacks, medicines were selected on the basis of presenting symptoms. During asymptomatic phase, medicines were selected on constitutional basis.

Results: Out of 2107 patients followed up, 52 patients were cured and 1822 patients improved in varying degrees: marked improvement in 856 patients, moderate improvement in 444 patients and mild improvement in 522 patients. Improved patients showed less frequent acute exacerbations and decreased intensity and duration of subsequent attacks of asthma. Out of these, 233 patients did not improve. *Arsenicum album* was seen to be the most useful and most frequently indicated medicine in the treatment of asthma as it alone improved 933 patients out of 1042 patients to whom it was prescribed. Other medicines found useful were *Hepar sulphuris* (n=51), *Kali carbonicum* (n=83), *Lycopodium clavatum* (n=60), *Natrum sulphuricum* (n=78), *Phosphorus* (n=34) and *Pulsatilla nigricans* (n=63). *Viburnum opulus* mother tincture was found useful during acute attacks of asthma (n=29).

Conclusion: The outcome of the study shows that homoeopathic medicines have a role in managing acute attacks of bronchial asthma as well as in controlling recurrent attacks. A group of most useful medicines in asthma were evolved and their most reliable indications were deduced in this study. The other objectives of the study that included identifying the most useful potencies of medicines, their frequency of administration and relationship with other medicines could not be achieved.

Keywords: homoeopathy; asthma; observational study; arsenicum album; hepar sulphuris; kali carbonicum; lycopodium clavatum; natrum sulphuricum; phosphorus; pulsatilla nigricans; rhus toxicodendron.

Introduction

Bronchial asthma is one of the most common diseases today. It is estimated that 4 - 5% of the population is affected with this disease. From age-old times several substances have been tried for its treatment, be it herbal home made potions or swallowing a live fish. Sometimes these measures do afford relief but cure remains elusive.

Bronchial asthma has a genetic link. Researchers in the USA claim to have identified a gene which may be responsible for asthma says Dr. Nicholas Nichlaides from the Institute for Molecular Medicine in Plymouth, Pennsylvania.¹

Bronchial asthma is defined as a chronic inflammatory disease of airways, which is characterized by increased responsiveness of the tracheo-bronchial tree to a multiplicity of stimuli. It is an episodic disease manifested by a wide spread narrowing of the air passages, increased secretion of mucus and mucosal oedema resulting in dyspnoea, cough and wheeze. Asthma is an episodic disease with acute exacerbations interspersed with symptom free periods. Typically, most attacks are short lived, lasting minutes to hours and clinically the patient seems to recover after an attack. However, there can be a phase in which the patient experiences some degree of airway obstruction daily. This phase can be mild, with or without superimposed severe episodes, or much more serious, with severe obstruction persisting for days or weeks; the latter condition is known as *status asthmaticus*.

Bronchial asthma occurs at all ages but predominantly in early life. About one half of patients develop at age 10, and another third occur before age 40. In childhood, there is 2:1 male/female preponderance, but the sex ratio equalizes by age 30.²

Two broad types of bronchial asthma have been described: allergic and idiosyncratic. *Atopy* is the single largest risk factor for the development of asthma. Allergic asthma is often associated with a personal and/or family history of allergic diseases such as Rhinitis, Urticaria, Eczema and high serum IgE levels.

A significant fraction of patients with asthma present with no personal or family history of allergy and with normal serum levels of IgE and therefore have disease that cannot be classified on the basis of defined immunologic mechanisms. These patients are said to have *idiosyncratic asthma*. In general, asthma that has its onset

in early life tends to have a strong allergic component, whereas asthma that develops late tends to be non-allergic or to have a mixed etiology.

The symptoms of asthma consist of a triad of dyspnoea, cough and wheezing. At the onset of an attack, patients experience a sense of constriction in the chest, often with a non-productive cough. Respiration becomes audibly harsh, wheezing in both phases of respiration, inspiration becomes prominent, expiration becomes prolonged, and patients frequently have tachypnoea, tachycardia and mild systolic hypertension. The end of an episode is frequently marked by a cough that produces thick and stringy mucus.

The diagnosis of asthma is established by demonstrating reversible airway obstruction. *Reversibility* is traditionally defined as a 15% or greater increase in FEV.³

Homoeopathic medicines are known to act in allergic conditions. They correct or reduce the host response to a particular antigen or antigens. The homoeopathy literature, also describe hyper or altered responses as disease trait or miasmatic dyscrasia. Plenty of references on respiratory diseases are available in homoeopathic literature, especially on bronchial asthma and numerous records of cure or relief are available in various books and journals, but systematic studies on a large group of patients have not been done or are not on record. Central Council for Research in Homoeopathy (CCRH), therefore, undertook a multi-centric open clinical trial to ascertain and evaluate the efficacy of homoeopathic medicines in bronchial asthma at its various institutes and units during the period 1978 to 2003.

Aims and Objectives

Primary

To determine therapeutic efficacy of homoeopathic medicines in the management of bronchial asthma with an objective to alleviate acute exacerbation of asthma and to prevent further progression of disease by controlling recurrent attacks.

Secondary

To identify reliable indications of the effective medicines, their most useful potencies, frequency of administration and relationship with other medicines.

Material and Methods

Study Design

A multi-centric, prospective, observational study (Open clinical trial) was carried out by Central Council for Research in Homoeopathy at its Regional Research Institute, New Delhi (1978 – 2000), Regional Research Institute, Gudivada, Andhra Pradesh (1984 – 2003), Regional Research Institute, Shimla (1987 – 2003), Clinical Research Unit, Udupi, Karnataka (1996 – 2003) and Clinical Research Unit, Patiala, Punjab (1996 – 2003). The data was compiled from the unpublished consolidated reports of these centres.

Study sample

Patients were enrolled from the general OPDs of these institutes and units.

Following signs and symptoms were considered for including a patient in the study:

- 1) Patients presenting with history of repeated episodes of dyspnoea or cough or both
- 2) Dyspnoea or cough accompanied by wheezing
- 3) H/o exposure to some triggering agent (may or may not be there).

First two criteria were considered essential in order to enroll a patient for this study. Basis of diagnosis included both subjective and objective symptoms in 1731 patients and only subjective symptoms in 376 patients. Treatment strategy focused on following three components –

- i. Management of acute paroxysm.
- ii. Management during asymptomatic phase to check subsequent recurrence.
- iii. General management, which essentially comprised of guidance to the patients to avoid triggering agents.

Outcome assessment was done on the basis of pre-defined parameters (Table 1).

A sample size of 2641 patients comprising of both males and females and of age group ranging from 1 ½ years to 83 years was studied (Table 2). Out of 2641 patients enrolled for the study, 2107 patients were under regular follow up of minimum one year. Most of the

patients enrolled in the study (72%) suffered from extrinsic asthma (Table 3). The duration of the complaints of patients ranged from 1 day to more than 30 years (Table 4).

Diagnosis was made on the basis of both subjective and objective findings at the time of reporting. Each participant underwent physical examination, thorough case taking and was treated on the basis of individual totality of symptoms as per homoeopathic principles. Laboratory investigations like total and differential white cell counts and erythrocyte sedimentation rate were carried out in all patients and they were advised general measures like steam inhalation, warm drinks and avoidance of exposure to cold, dust and other triggering agents. A detailed history was recorded of each patient and indicated homoeopathic medicines were prescribed on individual totality of each patient. Medicines in 6C,

Table 1: Parameters adopted for outcome assessment after treatment

Cured	Complete removal of subjective & objective symptoms with no subsequent attacks and escaping aggravating season without getting any symptom at least for 2 years.
Improvement	
Marked	Frequency, duration and intensity of attacks reduced remarkably. Tolerance to triggering agents increased.
Moderate	Frequency, duration and intensity of attacks reduced moderately with some tolerance to triggering agents developed.
Mild	Partial reduction of intensity of symptoms and duration during active treatment only.
No Improvement	No response after considerable period of treatment and status-quo ante persisted.
Worse	Aggravation of subjective and objective symptoms.
Dropped out	Patient does not report back after first, second or third visit or stops treatment before the next aggravating season comes. Poor compliance by the patient in respect of specific or general treatment prescribed.

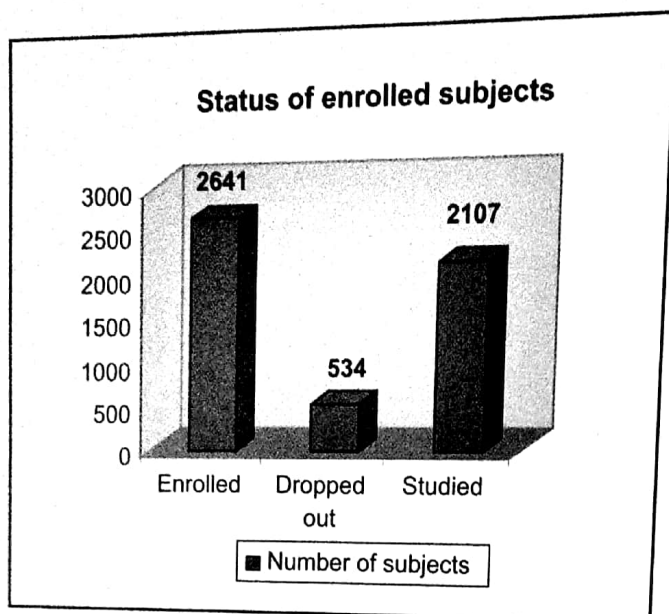


Figure 1: Status of enrolled patients

Table 2: Age profile of patients

Groups (in years)	Total	Male	Female
01 - < 05	136	82	54
05 - < 10	215	140	75
10 - < 15	232	129	103
15 - < 20	229	129	100
20 - < 25	219	100	119
25 - < 30	229	89	140
30 - < 35	307	127	180
35 - < 40	334	108	226
40 - < 45	231	124	107
45 - < 50	194	76	118
50 - < 55	164	91	73
55 - < 60	105	64	41
60 & >	46	26	20

Table 3: Clinical Types

Clinical Types	Total Patients	Male	Female
Extrinsic	1911	923	988
Intrinsic	679	312	367
Indeterminate (mixed)	51	25	26

Table 4: Duration of complaints

Groups	Total Patients	Male	Female
01 day - < 03 months	149	82	67
03 months - < 06 months	90	41	49
06 months - < 1 year	191	81	110
01 year - < 02 years	594	264	330
02 years - < 05 years	579	278	301
05 years - < 10 years	465	233	232
10 years - < 20 years	362	171	191
20 years - < 30 years	132	62	70
30 years & >	79	40	39

Table 5: Miasmatic Analysis

Miasms	Total Patients	Male	Female
Psora	870	417	453
Sycosis	1031	475	556
Syphills	16	08	08
Tubercular	286	134	152
Mixed	438	222	216

Table 6: Predisposing factors

Predisposing factors	Total Patients	Male	Female
Hereditary	737	385	352
Occupational	835	401	434
Pneumonia	74	30	44
Past history of suppressed eruptions	06	04	02

30C, 200C, 1M, and 10M potencies were used. During acute attack, medicine was mainly selected on the basis of acute totality, while during asymptomatic phase medicine was selected on constitutional basis. Mother tinctures of certain medicines were sometimes used to check acute attacks of asthma. Some times, an intercurrent anti-miasmatic medicine was also required. Patients reporting cure or improvement were further followed up

Table 7: Precipitating factors

Precipitating factors	Total Patients	Male	Female
<i>Environmental/Climatic</i>			
Seasonal change	596	310	286
Monsoon	210	99	111
Winter	340	174	166
Summer	76	46	30
Cloudy weather	57	23	34
Exposed to rain	68	32	36
<i>Triggering Factors</i>			
House dust	758	366	392
Grains dust	114	50	64
Chalk	56	25	31
Pollen	143	66	77
Talcum powder	34	19	15
Cotton	32	18	14
Road/Field dust	03	03	00
<i>Odours</i>			
Strong odour	115	47	68
Perfumes	154	49	105
Incense	209	75	134
Kitchen	258	96	162
Pungent	18	05	13
Smell of damp clothes	02	00	02
Cow dung	02	00	02
Offensive odour	29	12	17
Powder	10	06	04
Paints	82	28	54
Varnishes	97	44	53
Insecticides	56	20	36
<i>Fumes</i>			
Exhaust	96	44	52
Chemical	42	22	20
Cracker	76	38	38

Table 7: (Contd.)

Precipitating factors	Total Patients	Male	Female
Tobacco (passive)	223	104	119
Charcoal smoke	08	03	05
<i>Ingestants</i>			
Cold food/drink	467	251	216
Curd/Butter/Milk	196	85	111
Farinaceous food	18	06	12
Citrus fruits	135	70	65
Banana	116	56	60
Grapes	39	18	21
Mixed food	132	74	58
Sour food	125	59	66
Indigestibles	04	02	02
Sweets	08	06	02
Whisky/beer	02	02	00
Rice	19	09	10
Coffee	05	03	02
Lemonade	05	03	02
Orange	06	02	04
Milk	03	02	01
Eggs	09	03	06
Vinegar	04	03	01
Chicken	06	05	01
Tea	01	01	00
Mango	17	06	11
Dal	02	02	00
Pastry	02	01	01
Butter	01	00	01
<i>Others</i>			
Infections	73	36	37
Medication/Aspirin	11	05	06
Psychological	41	14	27
Physical stress	172	93	79

for two years or more to observe if they remained free of asthma.

Total patients enrolled were 2641 out of which 534 patients dropped out and 2107 were studied.

Results

Out of 2107 patients who completed follow up of minimum of one year, 52 patients were free from attacks of asthma (cured) during follow-up period of 2 years and 856 patients registered marked improvement, together accounting for 43%. These patients had no

Table 8: Intensity of attack

Intensity	No. of patients before treatment		
	Total	Male	Female
Mild	586	176	410
Moderate	601	223	378
Severe	919	447	472
Severe asthmatics	01	00	01

Table 9: Basis of prescription*

Basis of prescription	Total no. of patients		
	Total	Male	Female
Causation			
- Predisposing factors	189	83	106
- Precipitating factors	213	91	122
- Miasmatic factors	345	174	171
Generalities	206	108	98
Modalities	538	256	282
Presenting complaints	979	419	560
Constitutional symptoms	104	48	56
Repertorial totality	301	138	163
Others			
- Seasonal factors	13	06	07
- Keynote symptoms	76	34	42

Different bases of prescribing were employed at different occasions in some cases, therefore, the total no. of cases prescribed exceeds the no. of patients studied.

attacks or, markedly lesser attacks in terms of frequency, intensity and duration of acute attacks of bronchospasm and had developed marked tolerance to triggering agents. Another 444 patients (20.08%) had moderate relief, whereas 522 patients (24.77%) registered mild relief and 233 (11.05%) patients did not get any relief (Table-12).

Arsenicum album was proved to be the most useful remedy, in managing asthma including the acute attacks. It was prescribed to 1042 patients and was found to be useful in 933 patients. Other useful remedies were *Kali carbonicum*, *Natrum sulphuricum*, *Carbo vegetabilis*, *Rhus toxicodendron*, *Pulsatilla nigricans*, *Bryonia alba*, *Lycopodium clavatum*, *Ipecac*, *Phosphorus*, *Spongia*.

Table 10: Duration of treatment

Duration (in years)	Total	Male	Female
1-2	1385	597	788
2-3	160	87	73
3-4	99	45	54
4 & above	463	220	243

Table 11: Recurrence of complaints during / after treatment

Features	Total	Male	Female
No recurrence	52	18	34
Recurrence with			
• less intensity	1822	838	984
• same intensity	225	90	135
• increased intensity	08	03	05

Table 12: Improvement indices

Improvement index	Number of Patients	Percentage
Cured	52	2.40%
Improved		
• Markedly	856	40.60%
• Moderately	444	20.08%
• Mildly	522	24.77%
No improvement	233	11.05%

Viburnum opulus, *Antim. tartaricum*, *Lachesis*, *Kali bichromicum* and *Sulphur*.

Arsenicum album, *Kali carb.*, *Hepar sulph.*, *Natrum sulph.*, *Merc. sol.*, *Phosphorus*, *Sulphur*, *Lycopodium*, *Pothos foetidus*, *Arsenicum iodatum*, *Antimonium tartaricum*, *Kali sulph.*, *Nux vomica* and *Pulsatilla* proved their utility in removing or reducing dependency on other drugs in 340 patients (Table 18). In this study, 73 patients reported tolerance to change of weather under medicines like *Arsenicum album*, *Kali carb.*, *Hepar sulph.*, *Phosphorus*, *Sulphur*, *Arsenicum iodatum*, *Bryonia alba* and *Carbo veg.* (Table 19).

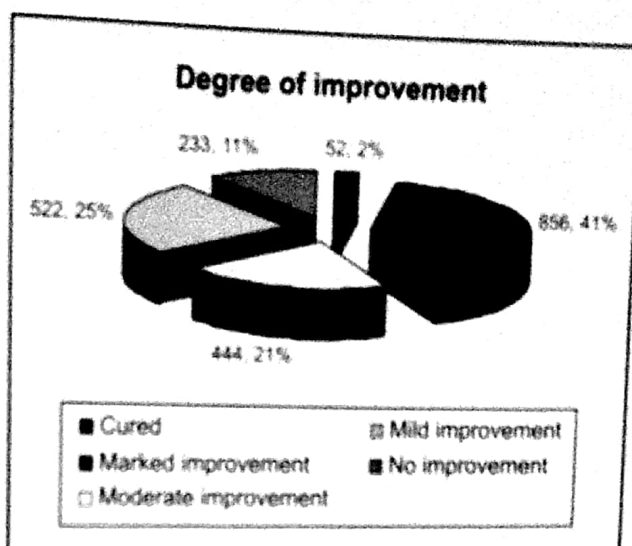


Figure 3. Degree of improvement

Table 13. Improvement in the intensity of attack

Intensity	No. of patients before treatment			No. of patients after treatment		
	Total	Male	Female	Total	Male	Female
Mild	586	176	410	841	322	519
Moderate	601	223	378	949	271	678
Severe	919	447	472	260	123	137
Asymptomatic	00	00	00	56	30	26
Status asthmaticus	01	00	01	01	00	01

Table 14: Improvement in the patients on the basis of prescription

Basis of prescription	No. of patients prescribed			No. of patients responded		
	Total	Male	Female	Total	Male	Female
Causation				189	83	106
- Predisposing factors	189	83	106	210	91	119
- Precipitating factors	213	91	122	64	32	32
- Miasmatic factors	345	174	171	179	87	92
Generalities	206	108	98	255	114	141
Modalities	538	256	282	650	255	395
Presenting complaints	979	419	560	72	35	37
Constitutional symptoms	104	48	56	282	126	156
Repertorial totality	301	138	163			
Others				13	06	07
- Seasonal factors	13	06	07	64	28	36
- Keynotes symptoms	76	34	42			

Table 15: Response to treatment in subjective symptoms

Subjective symptoms	No. of patients	
	symptom observed	symptom relieved
Dry cough	746	375
Cough with expectoration	1642	1423
Rattling in chest	870	761
Cough with rattling	367	59
Expectoration scanty	184	88
Expectoration profuse	136	94
Expectoration white	174	112
Expectoration mucoid	162	103
Expectoration purulent	61	34
Expectoration lumpy	47	30
Expectoration greenish	20	09
Expectoration easy	96	65
Expectoration difficult	30	14
Sputum offensive	03	00
Cough with vomiting	33	26
Cough leading to vomiting	03	03
Dyspnoea	1139	908
Wheeze	861	501
Dyspnoea on exertion	34	22
Perspiration during dyspnoea	278	213
Nausea during attack	17	12
Inspiration difficult	10	05
Expiration difficult	75	72
Chest pain	400	197
Congestion in chest	112	68
Tightness in chest	52	44
Complaints worse on lying down	59	44
Better sitting or bending forward	27	18
Better in knee-chest position	07	07
Better while sitting straight	65	50

Table 15: (Contd.)

Subjective symptoms	No. of patients	
	symptom observed	symptom relieved
Better by bending neck backwards	01	01
Better on lying with face on pillow	04	03
Catches cold easily	04	04
Coryza with thin nasal discharge	66	38
Running nose with sneezing	147	115
Frequent sneezing	164	88
Nasal obstruction	34	24
Itching eyes with lachrymation	44	33
Itching nose	07	06
Feverish feeling	04	04
Headache	64	46
Pain in throat	05	04
Leg pain	06	00
Malaise	439	331
Fever	53	41
Sore throat with pain	14	11
Restlessness	36	21
Sleeplessness	09	05
Sweating profuse	17	12
Nausea and vomiting	04	04
Flatulence with distension of abdomen	06	03
Anorexia	18	15
Thirst increased	34	28
Giddiness	04	02
General debility with trembling	06	05
Vertigo	08	06
Darkness before eyes	13	10
Loss of weight	02	02

Table 16: Response to treatment in objective symptoms

Subjective symptoms	No. of patients	
	symptom observed	symptom relieved
Respiratory distress	1731	1262
Prolonged expiration	1731	1262
Rhonchi	906	647
Rales	40	32
Crepitations	14	10
Cyanosis	09	07
Flapping ala nasi	05	04
Inflamed throat	19	15
Enlarged tonsils	05	04
Hypertension	09	07\
Eruptions with itching	07	05

Discussion

It was an observational study carried out at 5 centres to determine the efficacy of homoeopathic medicines in the management of bronchial asthma and to prevent further progression of disease by controlling recurrent attacks. The findings of the study add to the growing evidence that symptomatic homoeopathic treatment can be safely relied upon to manage asthma. Recurrent attacks of asthma could be gradually controlled, over a period, through the constitutional treatment during asymptomatic phase. These findings are similar to other studies on the role of Homoeopathy in the management of asthma^{4,12}.

From the knowledge of practice of medicine, it is known that the incidence of bronchial asthma is most commonly seen in the age group of 30 to 40 years. This study supports this fact as maximum number of patients reported (641; 25%) belonged to the age group of 30-40 years of age.

Another finding of the study shows that the maximum number of patients (758) had an attack of asthma after being exposed to house dust. This is in agreement with the findings of most studies on the association between house dust and asthma²¹⁻²³.

To our advantage, homoeopathic materia medica has abundant reference of symptoms related to these multiple factors which may either aggravate, cause or ameliorate asthmatic attack. From the list of precipitating factors (Table 7), it is observed that various triggering agents are responsible for precipitating the attacks of asthma. In 908 patients (43%), tolerance to triggers was enhanced, leading to either total or marked relief in frequency, duration and intensity of attacks. Thus, homoeopathic management could correct the altered host-response in asthma. This finding was also observed earlier in the studies of the management of asthma with homoeopathic medicines^{4,10}.

Homoeopathic materia medica also illustrates numerous medicines, which are affected by change of weather. This is consistent with the findings of others showing effect of change of weather on aggravating asthma¹³⁻²⁰. In this study, 73 patients reported better tolerance towards occurrence of asthma during the change of season with homoeopathic medicine.

Patients who were dependent on allopathic medicines like inhalers, oral and other medicines reported either less dependency or did not need them at all (Table 18). This is consistent with the findings of others showing lessening of their dependency on allopathic medicines like inhalers, oral and other medicines with the help of homoeopathic medicines^{5,9,11}.

Arsenicum album was proved to be the most useful remedy, in managing asthma including the acute attacks. It was prescribed to 1042 patients and was found useful in 933 patients. Other useful remedies were *Kali carbonicum*, *Natrum sulphuricum*, *Carbo vegetabilis*, *Rhus toxicodendron*, *Pulsatilla nigricans*, *Bryonia alba*, *Lycopodium clavatum*, *Ipecac.*, *Phosphorus*, *Spongia*, *Viburnum opulus*, *Antim. tartaricum*, *Lachesis*, *Kali bichromicum* and *Sulphur*. Many other studies done earlier also found some of the medicines, out of the above group, useful in managing asthma^{4,6,7,24} like *Arsenicum album*, *Kali carbonicum*, *Antim. tartaricum*, *Carbo vegetabilis*, *Ipecac.*, *Lycopodium clavatum*, *Pulsatilla nigricans* and *Sulphur*.

Arsenicum album, *Kali carb.*, *Hepar sulph.*, *Natrum sulph.*, *Merc. sol.*, *Phosphorus*, *Sulphur*, *Lycopodium*, *Pothos foetidus*, *Arsenicum iodatum*, *Antimonium tartaricum*, *Kali sulph.*, *Nux vomica* and *Pulsatilla* proved their utility in removing or reducing dependency on other drugs in 340 patients (Table 18). This is consistent with the findings of other study done by Francisco Xavier

Table 17: Most useful medicines with their prescribing indications

Name of the Medicine & potencies	No. of patients			Reliable indications of the medicines found useful
	Prescribed	Found useful	Percentage %	
<i>Arsenicum album</i> 6, 30, 200, 1M	1042	933	89.5	<ul style="list-style-type: none"> • Restlessness, anxiety and irritability marked during attack. • Despair of recovery. • Breathlessness with congestion and tightness in chest. • Inspiration difficult. • Cannot lie down during acute attack, compelled to sit up. • Cough dry or with scanty sputum. • Cough, dyspnoea, worse during cold, foggy and rainy weather. • Sputum frothy or mucoid; thick yellow or white; greenish; sticky. • Allergic skin rashes on exposure to cold. • Aggravation in morning on waking, at night. • Thirst increased, in small quantity, frequently.
<i>Carbo vegetabilis</i> 6, 30, 200	88	80	90.9	<ul style="list-style-type: none"> • Dyspnoea. • Congestion in chest with wheezing and cough. • Cough with expectoration. • Spasmodic cough. • Frothy, greenish and offensive expectoration. • < Morning, > lying down, sitting and bending. • Suffocation. • Bluish appearance. • Sweating. • Flatulence.
<i>Natrum sulphuricum</i> 6, 30	87	78	89.6	<ul style="list-style-type: none"> • Profuse, thick yellowish green expectoration. • Marked rattling in chest. • Worse in foggy, rainy and cloudy weather, especially during monsoons. • Worse drinking buttermilk. • Better by warm coverings.
<i>Kali carbonicum</i> 6, 30	87	83	95.4	<ul style="list-style-type: none"> • Asthmatic attacks between 2 to 5 a.m. • Patient sits up during attack and desires a drink - hot tea or hot water that ameliorates. • Scanty expectoration. • Excessive flatulence, better by passing flatus.
<i>Rhus toxicodendron</i> 6, 30, 200	86	86	100	<ul style="list-style-type: none"> • Dry cough. • Oppression in the chest. • Influenza with body ache, < on first motion and > by continued motion. • Bronchospasm from least exposure to damp cold weather, rain or after taking head bath. • Myalgia, worse from walking in cold water. • Cough relieved by drinking warm water. • Attack accompanied by wheezing, restlessness; worse at night. • Markedly ameliorated by keeping the bed warm.

Table 17: Contd.

Name of the Medicine & potencies	No. of patients			Reliable indications of the medicines found useful
	Prescribed	Found useful	Percentage %	
<i>Pulsatilla nigricans</i> 30, 200, 1M	84	63	75	<ul style="list-style-type: none"> Bronchial asthma associated with chronic sinusitis. Thick, purulent discharge from nose. Nasal obstruction better in open air. Cough and dyspnoea dating back to measles. Cough with rattling and retching, worse at night. Dyspepsia worse from fatty food.
<i>Bryonia alba</i> 30, 200	77	59	76.6	<ul style="list-style-type: none"> Stitching pain in chest. Dyspnoea with wheezing and cough Thin nasal discharge with sneezing. Dry cough. Cough aggravated after eating and in warm room; with backache and increased sweat on back. Dryness of mouth at night. Aggravation at night, evening, after eating, and better by absolute rest.
<i>Hepar sulphuris calcareum</i> 6, 30, 200, 1M	71	54	76	<ul style="list-style-type: none"> Sneezing worse on least contact with cold water, even washing of hands leads to an acute attack. Great chilliness, wants to cover the whole body. Acute attack may be associated with fever. Offended and irritated easily during attack.
<i>Lycopodium</i> 30, 200, 1M, 10M	60	60	100	<ul style="list-style-type: none"> Asthma associated with tormenting appetite, easy satiety by a mouthful or two. Easy expectoration. Attack associated with flatulence. Desires sweets and warm drinks. Right foot cold and left foot hot.
<i>Viburnum opulus</i> Q, 30, 200, 1M	34	29	85.2	<ul style="list-style-type: none"> Naso-bronchial allergies associated with wheezing. Allergic rhinitis. Spasmodic affections, bronchospasm.
<i>Tuberculinum</i> 30, 200, 1M	29	23	79.3	<ul style="list-style-type: none"> Mostly used as intercurrent medicine. Hyperactive and fidgety. Industrious. Susceptible to cold. Family h/o tuberculosis. Usually indicated during asymptomatic stage. Slightest exposure to cold causes nasal obstruction. Desires cold, refreshing and spicy things.
<i>Phosphorus</i> 30, 200, 1M	42	35	83.3	<ul style="list-style-type: none"> Anxiety, restlessness, worse when alone, always better in company. Allergic bronchitis since attack of pneumonia. Hoarseness of voice. Tubercular diathesis. Highly chilly patient. Desires cold drinks, juices, ice cream and lemonade during the attack.

Table 17: Contd.

Name of the Medicine & potencies	No. of patients			Reliable indications of the medicines found useful
	Prescribed	Found useful	Percentage %	
<i>Sulphur</i> 6, 30, 200	37	22	59.4	<ul style="list-style-type: none"> • Applied when indicated remedies fail to act. • H/o allergic dermatitis or asthma associated with skin eruptions. • Desires cold bathing but cold exposures result in nasal and respiratory problems. • Hot patient. • Burning sensation in palms and soles. • Increased thirst for cold water. • Desires sweets and cold things. • Constipated, hard stool.
<i>Ammonium carbonicum</i> 6, 30	15	09	60	<ul style="list-style-type: none"> • Acute attack preceded by coryza. • Dry cough associated with cold, coryza yet nose remains blocked. • Compelled to breathe through nose. • Cough worse from laughing. • Dyspnoea worse on least exertion.
<i>Drosera rotundifolia</i> 30, 200, 1M	05	03	60	<ul style="list-style-type: none"> • Cough with retching and vomiting. • Cyanosis accompanies bouts of cough. • Cough worse at night.

Eizayaga and Jose Eizayaga¹¹ where they found medicines like *Arsenicum album*, *Nux vomica*, *Sulphur* and *Pulsatilla* most useful in removing or reducing dependency on other drugs.

Similarly, 73 patients reported tolerance to change of weather under *Arsenicum album*, *Kali carb.*, *Hepar sulph.*, *Phosphorus*, *Sulphur*, *Arsenicum iodatum*, *Bryonia alba* and *Carbo veg.* (Table 19).

Homoeopathic materia medicas and repertories are very rich in clinically verified symptoms of respiratory conditions and results of this study prove that Homoeopathy is useful in controlling recurrent attacks of asthma. Achievements of the study not only include control or lessening of attacks but also, tolerance to triggers, to extremes of or change of weather and freedom from dependency on other medications by homoeopathic management, leading to improvement in quality of life. The results of the study show that out of 919 patients who reported severe complaints before treatment, only 260 patients had remained who continued to have severe complaints after treatment, rest 659 patients were improved. Fifty six patients reported to be asymptomatic after treatment.

Homoeopathic therapy was based on the clinical presentation and also individual's characteristic attributes, both mental/emotional and physical. During the course of the study some very important and interesting observations were made. In some patients symptoms included in the homoeopathic repertory (rubrics) were verified. In others, the symptom characteristic of asthma such as 'bronchospasm', when considered related to other organs, was also resolved under the influence of *Viburnum opulus*, which is a well known medicine for controlling spasmodic pains. This is in confirmation with the observation made by Tyler²⁵, that *Viburnum opulus* is found useful in heart cramp, which is the real condition, in angina pectoris and spasmodic laryngitis. On similar analogy, it can also be useful for controlling bronchospasm of asthmatics. When this medicine was prescribed to patients, enrolled in the study with 'breath holding attacks (spasmodic episodes)', it relieved the spasm. Since *Viburnum opulus* was applied empirically, during bronchospasm, its role needs to be researched fully by further studies.

The other objectives of the study that included most useful potencies of medicines, their frequency of

administration and relationship with other medicines could not be achieved. The limitations of the study include lack of objective assessment tools like Pulmonary Function Tests, Clinical scores and Quality of Life scale. The future studies need to take these factors into account to make study evidence based.

Table 18: Medicines found useful in reducing the dependency on allopathic and other drugs.

Name of medicine	Number of patients found useful in
Antimonium tart.	4
Arsenic alb.	91
Arsenic iod.	3
Belladonna	1
Calc.carb.	8
Carbo veg.	9
Causticum	1
Hepar sulph.	36
Kali carb.	39
Kali mur.	1
Kali sulph.	1
Lachesis	3
Lycopodium	16
Merc.sol.	16
Nat.sulph.	26
Nux vomica	1
Phosphorus	31
Pothos foetidus	16
Pulsatilla	7
Sambucus nigra	1
Sepia	1
Silicea	1
Spongia	1
Sticta pulm.	1
Sulphur	22
Thuja	3

Table 19: Medicines found useful for complaints of asthma occurring at change of weather

Name of Medicine	Change of weather	No of patients found useful in
Arsenic alb.	Asthma during cold, foggy and rainy weather	24
Arsenic iod.	Asthma during rainy weather	1
Bryonia alb.	Asthma during change of weather, from cold to hot	2
Carbo veg.	Asthma during warm, damp weather	1
Hepar sulph.	Asthma during change of weather, from hot to cold	6
Kali carb.	Asthma during change of weather, from hot to cold	6
Merc. sol.	Asthma during damp weather	3
Nat. sulph.	Asthma during foggy, rainy and cloudy weather	6
Phosphorus	Asthma during cold, humid and damp weather	6
Pulsatilla	Asthma during cold weather	4
Sambucus	Asthma in winter	2
Sulphur	Asthma in winter	12

Conclusion

Notwithstanding the lack of laboratory evaluation of the patients studied especially in terms of *pulmonary function tests*, the results of this clinical research study indicate a definite role of homoeopathic therapy in the management of bronchial asthma. However, further trials with laboratory based diagnosis and evaluation of the outcome are proposed to make a definitive conclusion.

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