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A Review of Clinical Research

STUDY OF EFFICACY OF GENUSEPIDEMICUS IN EPEDEMIC OF CHIKUNGUNYA LIKE FEVER AT KANPUR

> <u>Study Period</u> SEPTEMBER- OCTOBER- 2006

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Place: KANPUR

Dr. Surendra Kumar Agnihotri

Dr. Jagdish Chandra Nigam

Dr. Harsh Nigam

On behalf of Sharnam Homoeopathy Research Society

INTRODUCTION

Growths and developments of any branch of medicine depend upon new researches and analysis only. No doubt practicing Homoeopathy is terra incognata till now.

During month September 2006 while treating patients Dr. Harsh nigam observed a group of syndrome spread in Kanpur. This syndrome matched to what was being reported in Maharastra, Andhra Pradesh, Madhya Pradesh and he decided to act. This was an opportunity to serve the poor, to test efficacy of Homoeopathic medicine in Epidemic diseases and verify one neglected approach "Genus epidemicus" of Homoeotherapeutics. He constituted a team of young Homoeopaths and he workedwith the team collecting sufficient data for research.

This is an analysis of the data collected during treatment of the epidemic. These cases presented symptoms of chikungunya but due to lack of pathological confirmation we named this syndrome chikungunya like fever.

INTRODUCTION

IDENTIFYING THE PROBLEM

During month September 2006 while treating patients Dr. Harsh Nigam observed a group symptoms spread in Kanpur. This syndrome matched to what was being reported in Maharastra, Andhra Pradesh, Madhya Pradesh. Symptoms of this epidemic resembled Chikungunya and since there was no specific treatment for this epidemic; so he decided to act. This was an opportunity to serve the poor, to test efficacy of Homoeopathic medicines in epidemic diseases and verify one neglected approach "Genus epidemicus" of Homoeotherapeutics. He constituted a team of young Homoeopaths. Trained them especially for management of this syndrome and there combined efforts resulted in the complete picture of this epidemic and management modalities.

The background of study was the aphorism \$ 101 by Hahnemann in organon of medicine for the treatment of epidemic diseases:

"It may easily happen that in the first case of an epidemic disease that present itself to the physician's notice he does not at once obtain a knowledge of its complete picture, as it is only by a close observation of several cases of every such collective disease that he can become conversant with the totality of its signs and symptoms. The carefully observing physician can, however, from the examination of even the first and second patients, often arrive so nearly at a knowledge of the true state as to have in his mind a characteristic portrait of it, and even to succeed in finding a suitable, homoeopathically adapted remedy for it."

CONCEPTUALIZING THE PROBLEM

Even those diseases, which during every epidemic may be spread by an infectious matter, vary very much at each time of their occurrence in their manifestations and course. Every fresh epidemic shows itself even in some of its most striking symptoms to be so unlike all previous epidemics of the same name that we should be running counter to the principles of logic were we give to this very different malady the old name or were to employ the same medicinal treatment as for former epidemics of the same designation.

Genus epidemicus: Epidemics are visiting phenomena in all countries of the world, sudden in their development and affecting people of all ages, though sometimes they reveal preference for certain age groups. Thus measles, mumps, meningococcal meningitis, encephalitis attack children mostly. They are contagious in character and vary in their effects on the populaces because of the influence of such variable factors as age, environment level of nutrition and susceptibility to the disease. The invading pathogens may be bacteria, viruses. It was Hahnemann who first propounded the scientific cause of theory of epidemics and attributed its contagious character to "excessively minute invisible living creatures, animacules, as he named them", (apho 73,100, 102) *1. It was he who firmly laid down the general principles of prophylaxis (Apho 73-footnote)*1 and management, calling the selected medicine to be Genus epidemicus.

AIMS AND OBJECTIVES

- 1. To demonstrate the effectiveness of Homoeopathic medicine in clinical symptoms of Chikungunya like fever
- 2. To demonstrate the efficacy of Genus epidemicus approach
- 3. To compare the effectiveness of Homoeopathic medicines with Antipathic medicines
- 4. To demonstrate the effectiveness of Homoeopathic medicine as a preventive

medicine in clinical symptoms of chikungunya fever

REVIEW OF LITERATURE

Chikungunya spreading Vector and Larva



Cases of Chikungunya fever (in between 1952-2006) have been reported in the countries depicted in red on this map. In Africa, these include Burundi; Central African Republic; Comoros; Democratic Republic of Congo; Guinea; Kenya; Nigeria; Madagascar; Malawi; Mauritius; Mayotte; Reunion; Senegal; Seychelles, South Africa; Tanzania; Uganda; Zimbabwe. In Asia, these include Australia; Burma; Cambodia; India; Indonesia; Malaysia; Pakistan; Philippines; Taiwan; Thailand; Timor; Vietnam.

India is reeling under the effects of the country's worst epidemic of the mosquito-borne virus in decades with almost 45% of Indians having been infected by Chikungunya, according to the World Health Organization

Observed frequency of findings in classicals dengue fever in adults and chikungunya and dengue virus infections in Thai children diagnosed as having haemorrhagic fever

Finding	Classicaldengue Fever in adults	Chikungunya fever in Thai Children	Dengue haemorrhagic in Thai children
P			
Fever	+ + + +	+ + + +	+ + + +
Positive tourniquet test	+ +	+ + +	+ + + +
Petechiae or ecchymosis	s +	+ +	+ $+$
Confluent petechial rash	0	0	+
Hepatomegaly	0	+ + +	+ + + +
Maculopapular rash	+ +	+ $+$	+
Myalgia/ arthralgia	+ + +	+ +	+
Lymphadenopathy	+ +	+ +	+ +
Leukopenia	+ ++ +	+ + + +	+ +
Thrombocytopenia	+ +	+	+ + + +
Shock	0	0	+ +
Gastrointestinal bleeding	g +	0	+

=+-1-25%;++-51-75%;++++76-100%.

= Modified from Halstead SB et al. American journal of tropical medicine and hygiene, 1969, 18:984-996, and refers mainly to Caucasian adults.

Criteria	DHF(%)	Chikungunya Fever(%)
Injected pharynx	96.8	90.3
Vomiting	57.9	59.4
Constipation	53.5	40.0
Abdominal pain	50.0	31.6
Headacne	44.6	68.4
Generalized lymphadenopatny	40.5	30.8
Conjunctival injection	32.8	55.6
Cough	21.5	23.3
Rhinitis	12.8	6.5
Maculopapular rash	12.1	59.4
Myalgia/ arthralgia	12.0	40.0
Enanthema	8.3	11.1
Abnormal reflex	6.7	0.0
Diarrhoea	6.4	15.6
Palpable spleen	6.3	3.1
Coma	3.0	0.0

Non- specific constituational symptoms observed in haemorrhagic fever patients with dengue and chikungunya virus infection"

a Modified from Nimmannitya S et al. American journal of tropical medicine and 18: 954-971.

hygiene, 1969,

b Statistically significant difference

c Infants under 6 months.

Criteria	dengue haemorrhagic Fever (%)	chikungunya fever (%)		
Duration of fever				
2-4 days	23.6	62.5		
5-7 days	59.0	31.2		
>7 Days	17.4	6.3		
Haemorrhagic manifestations:				
positive tourniquet test	83.9	77.4		
scattered petechiae	46.5	31.3		
confluent petechial rash	10.1	0.0		
epistaxis	18.9	12.5		
gum bleeding	1.5	0.0		
melaena/ haematemesis	11.8	0.0		
Hepatomegaly	90.0	75.0		
Shock	35.2	0.0		

Criteria for differential diagnosis of dengue haemorrhagic fever and chikungunya fever

State	No. of affected districts	Total fever/ suspected Chikungunya fever cases	No. of samples sent to Laboratory	No. of confirmed cases	No. of deaths
Andhra Pradesh	22	77.396	1.224	248	0
Karnatka	27	758.225	4.944	294	0
Maharashtra	31	263.268	5040	679	0
Tamil nadu	35	62.847	641	111	0
Madhya Pradesh	21	46.407	669	62	0
Gujarat	25	71.077	1.023	145	0
Kerala	4	43.148		38	0
Andaman and Nicobar	2	4.462	0	0	0
NCT of Delhi	1	194	123	21	0
Rajasthan	1	72	5	0	0
Pondicherry	1	542	52	4	0
Total	170	1.327.683	13.721	1.602	0

Table: Chikungunya fever situation in India during 2006 (as on 11 October 2006)- Source: Ministry of Labour

PREVENTION: There is no vaccine or preventive drug. Prevention tips are similar to those for dengue or West Nile virus. Insect repellent containing DEET or another EPA- registered active ingredient on exposed skin should be used to prevent Chikungunya. Wear long sleeves and pants (with permethrin or another repellent). Have secure screens on windows and doors to keep mosquitoes out. Get rid of mosquito breeding sites by emptying standing water from flowerpots, buckets and barrels. Additionally, a person with Chikungunya fever or dengue should limit their exposure to mosquito bites.



ANTIPATHIC TREATMENT

No specific drug treatment against Chikungunya fever is available; thus, treatment of Chikungunya fever is supportive: bed rest, fluids, and mild pain medications such as ibuprofen, naproxen, acetaminophen, or paracetamol may relieve symptoms of fever and aching, provided that the person has no contraindications to these medications. Because aspirin can increase the risk of bleeding and possibly increase the risk for Reye's syndrome, it should be avoided during the acute stages of the illness. Few cases are severe enough to warrant hospitalization. All persons with Chikungunya fever should be protected against additional mosquito bites to reduce the risk of further transmission of the virus.

- Supportive care and rest
- There has been no effective vaccine developed to prevent Chikungunya
- To relieve symptoms of fever and joint pain the drug commonly used is Paracetamol
- Rest is indicated during acute joint symptoms. Movement and mild exercisemay improve stiffness and morning joint pains
- In unresolved arthritis that does not respond to aspirin and non-steroidal antiinflammatory drugs, Chloroquine Phosphate (250mg/day) has given some promising results
- Some studies have also shown that Chloroquine has some antiviral activity against this virus. However these are not conclusive studies

Over 12% of patients who contract Chikungunya virus infection develop chronic joint symptoms. These symptoms respond only partially to the non-steroidal antiinflammatory drugs. An open pilot study on the efficacy of Chloroquine phosphate was carried out and 10 patients completed 20 weeksof therapy. Both the Ritchie articular index and morning stiffness improved significantly. In the patient's assessment, 7 out of 10 considered their conditions to have improved. On the basis of the doctor's assessment, 5 of the 10 had improved. These results justify further controlled blind trails of Chloroquine in chronic Chikungunya arthritis.

PATIENT EDUCATION:

- Use insect repellent containing a DEET or another EPA- registered active ingredient on exposed skin. Always follow the directions on the package.
- Wear long sleeves and pants (ideally treat clothes with permethrin or another repellent).

- Have secure screens on windows and doors to keep mosquitoes out.
- Get rid of mosquito breeding sites by emptying standing water from flower Pots, buckets and barrels. Change the water in pet dishesand replace the Water in bird baths weekly. Drill holes in tyre swings so water drains out. Keep children's wading pools empty and on their sides when they aren't Being used.
- Additionally, a person with Chikungunya fever or dengue should limit their Exposure to mosquito bites in order to avoid further spreading the infection. The person should stay indoors or under a mosquito net.

RESEARCH METHODOLOGY

A. DEFINING THE POPULATION

- 1 The Study had been undertaken at three camps and O>P>D> Centers of District Kanpur. Place of camp:
 - Parade
 - Jajmu
 - Shivala
- 2. Criteria for screening Population were
 - a. Presence of fever prominent area at Kanpur
 - b. Poor hygiene and sanitation
 - c. Mosquito ridden area
 - d. Densely Populated area
 - e. Low socioeconomic status

B. TYPE OF STUDY

- 1.It is an Experimental, single blind and Retrospective study.
- 2. To confirm and reconfirm clinical symptom complex and validity of genus Epidemicus.
- **C. METHOD OF DATA COLLECTION, MANAGEMENT AND ANALYSIS:** The Study was undertaken by Homoeopaths of **Sharnam Homoeopathy research society** Kanpur.
 - 1) The specific case paper had been prepared for the study in which Homoeopathic Approach was taken under consideration
 - 2) Camps were organized to find out the Chikungunya like fever cases

- **3**) Patients were regularly followed up during camp and classified under fixed class of days 3,7, > (8-15), >15 (more than 15 days) days. Follow up were alsoasked by phone from those patients having phone number and not came for regular follow up.
- 4) Patients had been selected on the basis of their symptomatic or clinical presentations during camps.
- 5) **Probable Cases** had been those who had fever with arthralgia and or rash with chill; Presence of any of the specific symptoms suggesting Chikungunya like fever indicated in Chikungunya like fever surveillance format.
- 6) **Confirmed Cases** those who had Blood Examination which shows the presence of Chikungunya fever.
- 7) **Primary cases** Patients came from treatment without taking any medicines.
- 8) Secondary Antipathy cases (S.A.C) Patients came from treatment after taking antipathic medicines.
- **9)** Secondary Homoeopathic Cases (S.H.C) Patients came from treatment after taking homoeopathic medicines or preventive homoeopathic medicine.
- **10) Preventive Doses**: Age<10years:

Age10-<20 years: Age 20->20years: Directly on tongue for 7 days 3 drops three times a day 5 drops three times a day 10 drops three times a day

- 11) Dose Schedule for Chikungunmya like fever Instruction for Patients:
 - 1. Mix 15 drops of medicine in 50 milliliter or 10 tea spoon of water & to take 1 tea spoon of medicated water at interval of every 30 minutes
 - 2. Prepare number 1 and number 2 medicines separately in 10 tea spoon of water then 1 tea spoon of medicated water alternatively at interval of every 30 minutes.

11). Preventive medicine

- (a) Eupatorium perf. Q given as preventive medicines to those families and Surrounding families were chikungunya like fever cases were present and Advised to report us immediately after fever or any new symptom.
- (b) Cases of failure of preventive medicine were also labeled as Secondary Homoeopathic cases (S.H.C).

12) Result after treatment

- a) Absence of fever, chill and or rash with decrease intensity of pain in the case declared as **CURED**.
- b) Presence of fever in the case declared as **NOT CURED**.
- c) Decreased in intensity of fever such patients labeled as IMPROVED and finally in analysis considered as NOT CURED for uniformity of statistic.
- d) Those who have discontinued the treatment during the period of study were taken as **LEFT THE TREATMENT.**
- e) No change in symptoms but not worse the symptoms than the case declared as **STATUS QUO.**
- f) Patients not followed in any way omitted from the study.

- **13) Patient Education** During this study the persons of the area had been educated about causative factor & prevention of Chikungunya fever.
 - a) Presence bof breeding sites, stored water, cattle shed etc.
 - b) Details regarding use of mosquito repellants had been advised.
 - c) The district health authority had been regularly updated regarding number of cases found from the area and measures to prevent outbreak of further.
 - d) Chikungunya like fever had been taken with the support of District Health Authority.
- **14) Thermometer:** Gold MCP clinical thermometer was used for temperature measurement.
- **15**) Fever was categorized in three groups

.

- a. High grade $(3)102^{0}$ F->102⁰ F
- b. Moderate (2) $>101^{0}$ F- $< 102^{0}$ F
- c. Low grade (1)
- 16) Every symptom was categorized in three groups
 - a. High grade (3)
 - b. Moderate (2)
 - c. Low grade (1)
- 17) Regular nutritious diet and sanitation was advised
- **18**) Restriction of diet was suggested as per the diet and regimen guidelines given by Hahnemann in organon of medicine 6^{th} edition.
- **19**) Risk conditions were explained to patients and advised to avoid such conditions.

• PROJECT SITE

- Parade
- Jajmu

TRANING OF INTERVIEWERS

- 1. Clarification of all the points to be asked and examined in history taking as per case format.
- 2. Special training regarding advising all the contacted persons about awareness to prevent chikungunya like fever.

INCLUSION CRITERIA

- People, of any age and gender, with classical clinical manifestations of primary symptoms of Chikungunya like fever, gave verbal consent for study were included in the study and treated as out door patients.
- All the patients were selected from camp/ OPD basis and verbal consent taken for study.
- Classical manifestations considered for enrolment of a subject in the study were:

PRIMARY SYMPTOMS

- Sudden Fever
- Chill
- Arthralgia
- Eruptions maculo-popular and / or petachial (Rash)

ASSOCIATED SYMPTOMS

- THIRST
- Coryza
- Sneezing
- Headache
- Toothache
- Lacrimation
- Inflammation eye
- Any other symptoms

EXCLUSION CRITERIA

People with haemorrhagic fever or shock syndrome.

Those who did not follow medical advice were excluded from study

Psychologically unstable and non cooperative or those who did not give consent were exclude from study.

FOLLOW – UP CRITERIA

- 1. Subjects enrolled in the study were followed up every day/ alternate day, preferably in the OPD, failing which telephone number were used to ask follow up
- 2. Checking all the parameters found in previous visits with presenting complaints.

CHIKUNGUNYA LIKE FEVERCASE FORMAT

Attached in appendix

CLASSIFICATION OF DATA: SYNOPSIS OF DATA



B: Total No. of Preventive given= 1888

OBSERVATION TABLE

TABLE NO. 1 TOTAL DATA

Total sum of patients	2838
Total Peatients With No Follow up	702
Total Patients with Follow up	2136

As the above table shows that total no of patients came for the treatment were 2838 and out of them 702 (25%) patients were not came for follow up it means only 2136 (75%) cases were followed and taken under study.



TABLE NO.2 TYPES OS CASES

Types of Cases	TOTAL
Primary cases	1150
5	
Secondary Cases	956
J.	
Secondary	30
Homoeopathic Cases	

As above table shows out of 2136; 1150 (54%) were primary cases, 956 (45%) secondary antipathic cases and 30 (1%) secondary homoeopathic cases.



TABLE NO. 3 AGE WISE DISTRIBUTION OF PATIENTS

Adult	Children
1783	353

Table shows out of 2136 patients; 1783 (83%) were adults while 353 (17%) children.



TABLE NO. 4 SEX WISE DISTRIBUTION OF PATIENTS

Male	Female
1342	794

Table shows (1342) 63% patients were males while (794) 37% patients were females.



TABLE NO. 5 RELIGION WISE DISTRIBUTION OF PATIENTS

RELIGION	TOTAL
HINDU	687
MUSLIM	1442
OTHER	7
TOTAL	2136

Table shows that 68% of patients were Muslim, 32% Hindus and others approximately 0%.



TABLE NO.6 ECONOMIC STATUS OF PATIENTS

HIGH CLASS	LOW CLASS
581	1605

As above table shows 73% cases were from low socioeconomic class while 27% patients were from high socioeconomic class.



TABLE NO. 7 DAY WISE NUMBER OF PATIENTS

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
NO.	4	2	4	4	23	20	52	72	80	68	85	145	34	81	70
DAY	16	17	18	1	9 1	20	21	22	23	24	2	25 2	26	27	28
NO.	68	103	86	1	25	114	127	131	132	15	1 1	35 7	77	29	7
				<u>,</u>	·						÷				
DAY	29	30		31	32	3	33	34	35						



TABLE NO. 8 (A) SYMPTOMS RECORDED DURING TREATMENT

SYMPTOM	PERCENTASE
FEVER	100%
TOOTHACHE	98.64%
JOINT PAIN	97.19%
BONE PAIN	91.90%
MUSCLE PAIN	89.93%
THIRST	83.99%
CHILL	72.43%
HEADACHE	71.07%
BITTER TASTE	69.43%
PETECHIAE	0%
SHOCK	0%



TABLE NO. 8 (B) NON SPECIFIC CONSTITUTIONAL SYMPTOMS

SYMPTOM	PERCENTASE
VERTIGO	37.54%
NAUSEA	31.88%
EYES BURNING	26.73%
CORYZA	19.15%
RASH	17.60%
CONSTIPATION	15.78%
SNEEZING	14.33%
LACRIMATION	8.10%
DIARRHOEA	8%



TABLE NO. 9 EFFECT OF TREATMENT IN ADULT ANDCHILDREN

RESULT	ADULT		CHILDREN	
CURE	1625	91.93%	331	94.05%
IMPROVE	63	3.53%	9	2.55%
LEFT TREATMENT	5	0.27%	1	0.28%
NOT CURE	90	5.07%	11	3.12%
TOTAL	1783	100%	352	100%

As the above table shows that the cure rate in adult was 91.13% while in children 94.05%. The rate of improvement in adult is 3.53%, in children 2.55%. 0.27% Adult and 0.28% children, left the treatment, 5.07% adult and 3.12% children could not cure.



TABLE NO. 10 RESULT OF TREATMENT WITH RESPECT TO **TYPE OF CASES**

Cases	Primary cases	Secondary Antipathic Cases	Secondary Homoeopathic	
			Cases	
DAY	C NC IM LT	C NC IM LT	C NC IM LT	
3 rd	93.04% 3.13% 1.3% 0.09%	77.20% 5.54% 5.02% 0.42	83.33% 3.33% 0% 0%	
7 th	95.22% 3.13% 1.3% 0.09%	84.10% 6.28% 5.65% 0.52	93.33% 3.33% 0% 0%	
> 7	95.48& 3.13% 1.3% 0.09%	85.67% 6.49% 5.75% 0.52%	96.67% 3.33% 0% 0%	
>15	95.48% 3.13% 1.3% 0.09%	86.72% 6.80% 5.96% 0.52%	96.67% 3.33% 0% 0%	

As above table shows

(A)Primary cases:

- (a) Cure rate 3^{rd} day 93.04%, 7^{th} day 95.22%, >7 days 95.48%, >15 days 95.48%
- (b) Not cured cases: the percentageof not cured cases remained same through out Follow up that is 3.13%
- (c) Improved cases: the percentage of improved cases remined same through out Follow up that is 1.3%
- (d) Left treatment : the percentage of cases left treatment remained same through out Follow up that is 0.09%

(B) Secondary Antipathic cases:

- (a) Cure rate 3^{rd} day 77.20%, 7^{th} day 84.10%, >7days 85.67%, >15 days 86.72% (b) Not cured cases: 3^{rd} day 5.54%, 7^{th} day 6.28%, >7days 6.49%, >15 days 6.8%
- (c) Improved cases: 3^{rd} day 5.02%, 7^{th} day 5.65%, >7 days 5.75%, >15 days 5.96%
- (d) Left treatment: 3^{rd} day 0.42%, 7^{th} day 0.52%, >7 days 0.52%, >15 days 0.52%
- (C) Secondary Homoeopathic cases:
 - (a) Cure rate 3^{rd} day 83.33%, 7^{th} day 93.33%, > days 96.67%, > 15 days 96.67%
 - (b) Not cured cases: the percentage of not cured cases remained same through out follow up that is 3.33%



TABLE NO. 11 RELATION BETWEEN DAYS AND NO. OF

PATIENTS CURED

DAY	NO. OF PATIENTS
3 rd day	1833
7 th day	94
>7 days	19
> 15 days	10
Total	1956

Among all patients 1833 (93%) were cured on 3^{rd} day, 94 (5%) on 7^{th} day, 19 (~1%) in more than 7 days and 10 (~1%) on more than 15 days.

TABLE NO. 13 MEDICINES USED IN TREATMENT

Medicine	No. of Patients
EP+B	1758
EP+NM	18
EP+RT	360

Above table shows; Eupatorium-perf. and Bryonia-alb. Were used in 1758 (82%) cases while Eupatorium perf. and Natrum mur. Were used only in 18 (1%) cases and Eupatorium perf. and Rhus. Tox. Were used in 360 (17%) cases.



TABLE NO. 14 PREVENTIVE WORK RATE

PREVENTIVE GIVEN	WORKED	FAILED		
1888	1862	26		

As the above table shows that the preventive medicine was given to the 1888 families and only 26 patients reported fever complain.



DISCUSSION

The sample selection was the random survey of population as a part of Chikungunya like fever awareness programme and the size of sample was 2136.

- Observed frequency of symptoms in >50% of Chikungunya like fever cases wre Fever, Joint Pain, Bone Pain, Muscle Pain, Toothache, Thirst, Bitter Taste, Headache, chill and Bitter taste of mouth that is similar given by American Journal of Tropical medicine and Hygiene 1969*8. Other non specific constitutional symptoms, frequency < 50% of Chikungunya like fever cases were vertigo, Diarrhea, Constipation, Nausea, Sneezing, Coryza, Eye burning, lacrimation, Rash,. During study a peculiar symptom of toothache (98.64%) was observed. In no other literature this symptom had been mentioned. This needed further study to complete picture of Chikungunya. As per medical literature shock and petechiae symptom were not found in any case, it differentiates these cases with dengue, Malaria and Viral meningitis.
- Study make it amply clean that the course of Chikungunya like fever if rapidly shortened by Homoeopathic treatment science study was not placebo controlled but result suggest placebo controlled double blind trials are needed.
- Table 12 shows response of Homoeopathic treatment in primary cases on 3rd day 93.04% proves that the genus epidemicus approach not only works but works rapidly. It also shatters the myth that Homoeopathic medicines are slower to act or not a treatment of choice in acute cases.
- Table no. 10 shows cure rate among primary cases were 95.48%, Secondary antipathic cases 86.72% and Secondary Homoeopathic cases 96.67% that means patients came after taking antipathic medicines were less responsive to homoeopathic medicines than those who did not taken any medicine or taken Homoeopathic medicines previously. Percentage of not cured patients is also high among Secondary antipathic cases (6.8%) than primary cases (3.13%) or Secondary homoeopathic cases (3.33%).

These data shows that patient taking antipathic medicines previously have less response to Homoeopathic treatment than those who present as primary cases. This is consistent to Hahnemann's observation that medicinal miasma is more difficult to treat.*1 (Preface to the fifth edition)

• Table 2 shows that out of 2136 patient 1150 (54%) patients reported without taking any medicine this shows need of medical help in such type of area during epidemic, the question that should be studied further and need to be verified that is whether Homoeopathic is popular in such people because it's effectiveness, it's cost effectiveness or poor orthodox medical support in these area?

This table also shows 956(44.76%) patient reported after taking antipathic medicines Out of them 329(34.41%) patient took up to >7 days and 281(29.39%) taken up to more than 15 days, this arises a new question that antipathic medicines taken by them were able or not to check the course of such epidemic? While Homoeopathic medicine cured 93% cases on 3rd day (Table 10). This is only possible after comparative study of Placebo, Homoeopathic and Antipathic treatment of such cases

- Table 9 shows that the cure rate in adult was 91.13% while in children 94.05%. This data indicates that children are sensitive to homoeopathic medicines
- Table 14 shows Eupatorium-perf. And Bryonia-alb. Were used in 1758 cases (82%) while Eupatorium-perf and Natrum-mur. Were used only in 18 cases (1%) and Eupatorium-perf. and Rhus.tox. were used in 360 cases (17%).

Late in the epidemic came forth toothache and mouth ulcers symptoms that is Why Natrum mur. Presented late as symptomatic simillimum and prescribed in less number of cases along with Eupatorium perf.

These data verifies that Eupatorium-perf and Bryonia alb. Were the genusepidemicus for the **epidemic of Chikungunya like fever at Kanpur September 2006.**

Sequential multiple remedy in alteration*7 approach was followed during treatment of this epidemic though this was not classical single remedy approach but reason behind this can be justified with the approach of \$92 that Chikungunya like fever is a rapidly deteriorating acute disease hence required high potency with frequent repetition so we used 1000ch.

"There are some medicines (e.g., ignatia, also bryonia and rhus, and sometimes belladonna) whose power of altering man's health consist chiefly in alternating actions-a kind of primary action symptom that are in part opposed to each other. Should the practitioner find, on prescribing one of these, selected on strict homoeopathic priciples, that no improvement follows, he will in most cases soon effect his object by giving (in acute diseases, even within a few hours) a fresh and equally small dose of the same medicine)"*1 (251).

We chose two remedies in alteration because we were not sure of whether genus epidemicus of the current epidemics, so Eupatorium perf. was prescribed as pathogentic simillimum because Homoeopathic Pathogentic Trial (H.P.T/ Drug proving) indicates it to be effective in dengue fever and dengue like fever so is the claim of previous Homoeopathic experience. The next prescribed medicine was symptomatic simillimum, Bryonia and Rhus tox were two out standing remedies on repertorisation that is why Rhus tox. was used along with Eupatorium perf. in cases of Chikungunya like fever with rash and bryonia along with Eupatorium perf. in case of Chikungunya like fever without rash.

Result shows success of alternating medicines but in future efficacy of pathogentic simillimum and symptomatic simillimum would be checked single and comparatively this will verify effectiveness of single medicine Vs alternating medicines in treatment of epidemicus.

• Review of literature shows that WHO says there is no specific treatment for Chikungunya, only some antipyretics are suggested for fever; most commonly used antipyretics is Paracetamol (*11) that cost 1 Rs. Per tablet and the dose of paracetamol is 3-6 times daily up-to the fever last that is approximately 5-6 days average (practically that is not seems to cure as observation shows patients taken medicines as the observation table shows only 6.28% can get rid of fever on 7th day after taking antipathic treatment) the treatment should be continued up to fever that is min 4 days and may be more than this, so total cost of treatment is 12 Rs. If patient takes medicine 3 tablets for 4 days and while on the other hand the cost of Eupatorium –perf. 1M CH is 36 Rs. MRP (Dr. Willmar Schwabe India limited) for 10 ml, that is sufficient for treatment of minimum 100 patients so the cost of Homoeopathic treatment is 0.36 Rs. More cheaper than antipathic treatment.

- Another important thing is that side effects of Paracetamol are Nausea, epigastric distress, acute toxicity result in hepatic failure while Homoeopathic medicines have no side effect.
- WHO says there is no preventive treatment for Chikungunya (*11) but as table no. 13 shows preventive medicine indicated after sketch of complete picture of epidemic disease. (Aphorism 102 organon of medicine 6th edition.*1)
- Table 6 shows 73% cases were from low socioeconomic class while 27% patients were from high socioeconomic class. This indicates that good sanitation and education are best preventive medicines.
- Table 3 shows 63% patients were male while 37% patients were female. This shows male are more prone for Chikungunya like fever than female. (Probably because males are outdoors.)

CONCLUSION

- Genus epidemicus as a therapeutic tool is valid and efficacious.
- Sequential multiple remedy prescribing in alternating doses rapidly control the epidemic
- Eupatorium-perf and Bryonia alb. Were the genus epidemicus for the epidemic of Chikungunya like fever September 2006
- Preventive medicine for Chikungunya like fever is Eupatorium perf.
- Homoeopathic treatment for Chikungunya like fever is cost effective in comparison to Antipathic medicines
- Homoeopathic treatment for Chikungunya like fever is more effective that antipathic treatment.
- Homoeopathic treatment is more rapid and has no side-effect for the treatment of Chikungunya like fever than antipathic treatment.
- Study reveals toothache as a new symptom of Chikungunya like fever.
- Symptoms Profile of epidemic of Chikungunya like fever September 2006 was
 - 1. Fever
 - 2. Toothache
 - 3. Joint pain
 - 4. Bone pain
 - 5. Muscle pain
 - 6. Thirst
 - 7. Chill
 - 8. Headache
 - 9. Bitter taste
 - 10. Non specific constitutional symptoms were

Vertigo, Nausea, Eyes burning, Coryza, Rash, Constipation, Sneezing and Lacrimation

METHODOLOGICAL DIFFICULTIES ENCOUNTERED IN CONDUCTING RESEARCH IN HOMOEOPATHY

Firstly, conducting a clinical trial becomes difficult because there is practically no single remedy for a disease in homoeopathy. A selection of drug is mostly dependent on individualization of a case. Two persons with the same disease, say Chikungunya like fever, may call for two or more different homoeopathic remedies. Thus the conventional form of clinical trial may demand to conduct as many clinical trials for as many diseases as many remedies used in homoeopathy to show causal efficacy for all of them. Therefore, the best way of perform an experiment in homoeopathy is by following a "double blind placebo control" (I.e. by using the "vehicle" of the drug to a group of patients who do not know they are on "placebo). This will give more credibility if the "Varum" group shows better response in terms of alleviation of disease/ disease symptoms than "placebo". Again, such studies will have to be supported with statistical analysis and meta-analysis. Many such clinical evidences have now been accumulated to suggest that homoeopathic drug have positive effects on human patients.

This study enlightens the way of further studies to confirm:

- (a) Placebo Vs Homoeopathy in management of epidemicus
- (b) Placebo Vs Homoeopathy Vs Antipathy in management of epidemics
- (c) Single remedy Vs Alternate medicines in Treatment of rapidly deteriorating acute diseases for example epidemic

PRACTICALDIFFICULTIESENCOUNTEREDINCONDUCTINGRESEARCH ON HOMOEOPATHY

- 1. Lack of awareness among the people of rural area regarding the efficacy of Homoeopathic medicines.
- 2. Poor Socioeconomic conditions do not allow the sufferers to stay at home for rest and follow-up visits hampered a lot.
- 3. III lighted and ill ventilated houses, presence of burrow pits, ditches, poor sanitation and drainage facility are the rich source of relapsing fever even after cure for certain period of time.
- 4. Laborers associated with agriculture field having cattle shed in their houses, which is also a source of mosquito breeding and cannot be removed.
- 5. Once free from fever people resume their duty quickly so difficult arises igetting follow-up precisely.
- 6. Opposition of so called physicians of jajmau area affected a lot as that was the major area of patient. Due to results of homoeopathic medicines our camps were full of patients on other hand they have no or vary less patients, as camps were affecting there private practice.

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APPENDIX

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Sharnan Homoeopathy research society Shivala road Kanpur, U.P

Epidemic case record and screening Performa							
Name of area in-charge Dr.Name of Physician Dr.				an Dr.			
Center code 0	Case	No		Pho	ne No.		Date
Name:		Ag	e: S	ex: M/I	F/C R	eligion Hi/ I	Mu/ Oth
Address:			ľ	Marital	status S/I	M/D/W	
Diet: V/Nv/Egg Qua	alifi	catio	n: < 10	$^{\rm th}/12^{\rm th}/$	Gra/ PG	Vaccination	: Issue: Mc/ Fc
Occupation: Home	mak	ter/ of	ffice/ L	abour/	others		
Previous Treatmen	t:				Pre	eventive Tre	eatment:
Symptoms\ Days	0	3	7	>7	>15		
Fever							
Chill							
Nausea							
Vomiting							
Headache							
Thirst							
Rash:Mac/Pap/Pust							
Joint Pain							
Bone Pain							
Muscle Pain							
Burning eyes							
Lachrymator eyes							
Inflammation eyes							
Sneezing							
Toothache							
Bitter taste of							
mouth							
Constipation							
Diarrhea							
Other symptoms							
Past H/O Major illne	ess:			Family	H/O Mai	or illness:	
Preventive med:							
Lab reports: Before treatment: After treatment:							
Treatment:							
Follow-up: Date: State: Improve? Status Quo/Left/ Cured							
Result:			Co	mment	s:		

Sign of Physician

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