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Original Article

A group of homoeopathic medicines for COVID-19: A systematic review of clinical features

Horacio Miguel De La Luz Escalante[1]*, Nazmul Hasan[2], Adriana Gonzalez Delgado[1,3], Salvador Gonzalez Soto[1,4], Jessica Maria García Vivas[1,4,5]

[1]National Polythechnic Institute, National School of Medicine and Homeopathy, Medical Surgeon and Homeopath program, Mexico City, [3]University of Health, Subdirectorate of academic training, [4]National Polythechnic Institute, National School of Medicine and Homeopathy, Homeopathic Therapeutics Postgraduated program, [5]National Polythechnic Institute, National School of Medicine and Homeopathy, Homeopathy Research Laboratory, Mexico City, [2]Dr. Nazmul's Chamber, Dhaka, Mirpur-1, Bangladesh

Abstract

Background: Historically, several homoeopathic medicines are known to have attributed a significant role in the control and management of infectious epidemic diseases. **Objectives:** This study aimed to compile a list of prospective homoeopathic medicines for the treatment and prophylaxis of the COVID-19 epidemic by conducting a systematic review and statistical analysis of clinical characteristics of this emerging coronavirus disease. **Materials and Methods:** A systematic review protocol was developed according to the reporting items of the Preferred Reporting Items for Systematic Reviews and Meta-Analyses statement. Articles for review were selected from PubMed, World Health Organization database, MedRxiV, and BioRxiv. Studies in English and simplified Chinese from December 2019 to March 26 2020 were included. Data on clinical characteristics, laboratory and CT chest results of COVID-19 were extracted and analysed. Several symptoms and their intensity were statistically analysed. **Results:** Seventy-three studies were included. Amongst COVID-19 patients, fever (119.869 ± 24.425 [95% confidence intervals: 71.149–168.589]), dry cough (91.028 ± 19.555 [52.007–130.050]) and dyspnoea (24.594 ± 5.949 [12.722–36.465]) were the most common symptoms. Leucopenia (16.06 ± 5.07 [5.95–26.18]) in blood, ground-glass opacity (62.23 ± 18.82 [24.74–99.72]), patchy (21.48 ± 12.36 [3.13–46.11]) and consolidation (18.67 ± 9.18 [0.373–36.968]) in the lungs were observed. The selected sign and symptoms were repertorised, which resulted in a list of multiple homoeopathic medicines as potential medicines for COVID-19, led by *Arsenic Album (*94.59%) *and Bryonia alba* (91.89%). **Conclusion:** Considering the current clinical manifestations, this is a pioneer study related to finding a plausible list of homoeopathic medicines that might help the profession in the treatment as well as to select a prophylactic of COVID-19 disease.

Keywords: 'Coronavirus, 'COVID-19', '*Genus epidemicus*', 'Homoeopathy'

Introduction

Several viral pneumonia cases occurred in Wuhan, China in December 2019, caused by a novel coronavirus,[1] which declared COVID-19 as a pandemic.[2,3] Historically, several homoeopathic medicines attributed a significant role in the control and management of infectious epidemic diseases including scarlet fever (1799), asiatic cholera (1831), Spanish flu (1920), keratoconjunctivitis (1995) and Chikungunya (2007).[4-14]

Enumerating an epidemic region as a 'single patient' may help to describe all the striking symptoms (including peculiar, uncommon, redline and single symptoms) which can lead to an effective *Genus epidemicus* medicine.[15-18]

A group of experts from Ministry of AYUSH, the Indian ministry of alternative medicine, has recommended homoeopathic medicine *arsenic album* 30C for protection against coronavirus infection.[19] We have collected the latest

***Address for correspondence:** Dr. Horacio Miguel De La Luz Escalante, National Polytechnic Institute, National School of Medicine and Homeopathy, Medical Surgeon and Homeopath program, Mexico City.
E-mail: digimiguel31@gmail.com
Dr. Jessica Maria Garcia Vivas, Homeopathy Research Laboratory, National School of Medicine and Homeopathy of National Polytechnic Institute, Guillermo Massieu Helguera 239 Fracc. La Escalera C.P 07320, Mexico City, México.
E-mail: pjessgar@yahoo.com

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studies about the clinical characteristics of COVID-19 and conducted this systematic review and statistical analysis in different populations to provide references for finding the most indicated medicines for COVID-19.

Materials and Methods

Study design

This study followed a preliminary exploratory and descriptive design. The study was conducted to find contemporary clinical manifestations of COVID-19 and analyse them to sort homoeopathic specific medicines, denominated as the most indicated medicines list.

Search databases and search strategies

A systematic review was performed and is being reported according to the 'Preferred Reporting Items for Systematic Reviews and Meta-Analyses' (PRISMA) statement. We searched four databases PubMed, Global literature on coronavirus disease of World Health Organization database, MedRxiv, and BioRxiv, to identify studies reporting COVID-19. The following keywords existing in MeSH were used in the search: 'clinical findings' or 'clinical characteristics' or 'Signs' and 'Symptoms' and 'COVID-19'.

Inclusion and exclusion criteria

Articles that were published in English and Chinese from December 2019 to 26th March 2020, were considered for this study. Irrespective of any design, based on the title and abstract, the articles were listed as a primary inclusion criterion. This also included diagnosed patients with severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) infection who were treated in intensive care unit; and the clinical features of the patients who died due to SARS-CoV-2 were also considered. The considered clinical features comprised of subjective symptoms and signs, laboratory findings, abnormal Computed Tomography (CT) imaging results, forensic reports and comorbidities.

Non-English or Chinese articles that were published more than once, and those that presented with insufficient data on clinical characteristics were not included in the systematic review.

Data extraction and quality assessment

All the articles were critically appraised using the Methodological index for non-randomized studies (MINORS).[20] Microsoft Excel database was used to record all available information. Data extraction, when available, included demographic information, clinical characteristics, abnormal chest computer tomography (CT) results, laboratory findings, the illness onset of the symptoms, comorbidities and deaths of patients.

Data analysis

We performed data analysis using meta-packages in STATA/ IC 15.1.(STATA/ IC 15.1, StataCorp LLC, College Satation, Texas, USA) We first unified all units of variables and then, expressed continuous variables as mean (standard deviation) ± standard error (SE). The pooled estimated prevalence with 95% confidence intervals (95% CI) of clinical symptoms, laboratory findings and chest CT findings of COVID-19 patients were calculated using a random-effects model because high variability between studies was expected.

Selection of the most indicated medicines

To perform effectively and efficiently, a systematic approach was adopted which is as follows. The results from signs and symptoms, abnormal chest computer tomography (CT), laboratory findings and comorbidities of COVID-19 were used for constructing an epidemiological profile.

After observing the totality of clinical characteristics, both the common symptoms of the disease, as well as uncommon or peculiar symptoms found in most patients suffering from COVID-19, were converted into the repertory language. After analysing the chest CT findings, considering their pathophysiology, and its patterns of clinical manifestations, they were included into repertorisation. In this regard, we used the Complete Repertory Database from Hompath Zomeo Repertory Software version 13.7.2®.(Hompath Zomeo Repertory Software version 13.7.2®, Mind Technologies Pvt Ltd 8, Mumbai, India)[21] We also validated the equity of the data using Radar 10®[22] software that is counted in the supplementary material [Supplementary Tables 1-4].

The selection of the homoeopathic medicines for COVID-19 was done by the standard method of determining the *Genus epidemicus* and a statistical approach. To complete and fulfil the totality of symptoms, according to homoeopathic philosophy, few common mental symptoms were added in the repertorisation. The number of symptoms and their intensity covered for every homoeopathic medicine was statistically analysed. Means ± SE and 95% CI were calculated to describe the distributions of categorical and continuous variables, respectively. The baseline data were analysed using the Stata version 15.1 software (STATA/ IC 15.1, StataCorp LLC, College Satation, Texas, USA).

Results

Research selection and quality assessment

A total of 266 articles were selected for the study; after deleting duplicates, a sum of 241 records was retained, of which 51 were excluded based on the title or abstract. Then, 92 were eliminated due to lack of information on clinical characteristics. Finally, 25 were eliminated after reading the full text, and a total of 73 articles were included in this study[23-96] [Figure 1].

Demographic characteristics and comorbidities

The study of clinical data included 73 studies with 11,139 patients. Table 1 summarizes the demographic characteristics and comorbidities of included studies. The mean age of the patients with SARS-CoV-2 infection was 44.72 (95% CI: 40.92–48.52); the mean of male patients was 75.45 and 66.35 female. The results of the comorbidities examination showed that hypertension (23.97±, 95% CI: 13.86–34.07), diabetes (11.81±, 95% CI: 6.88–16.75), and cardiovascular

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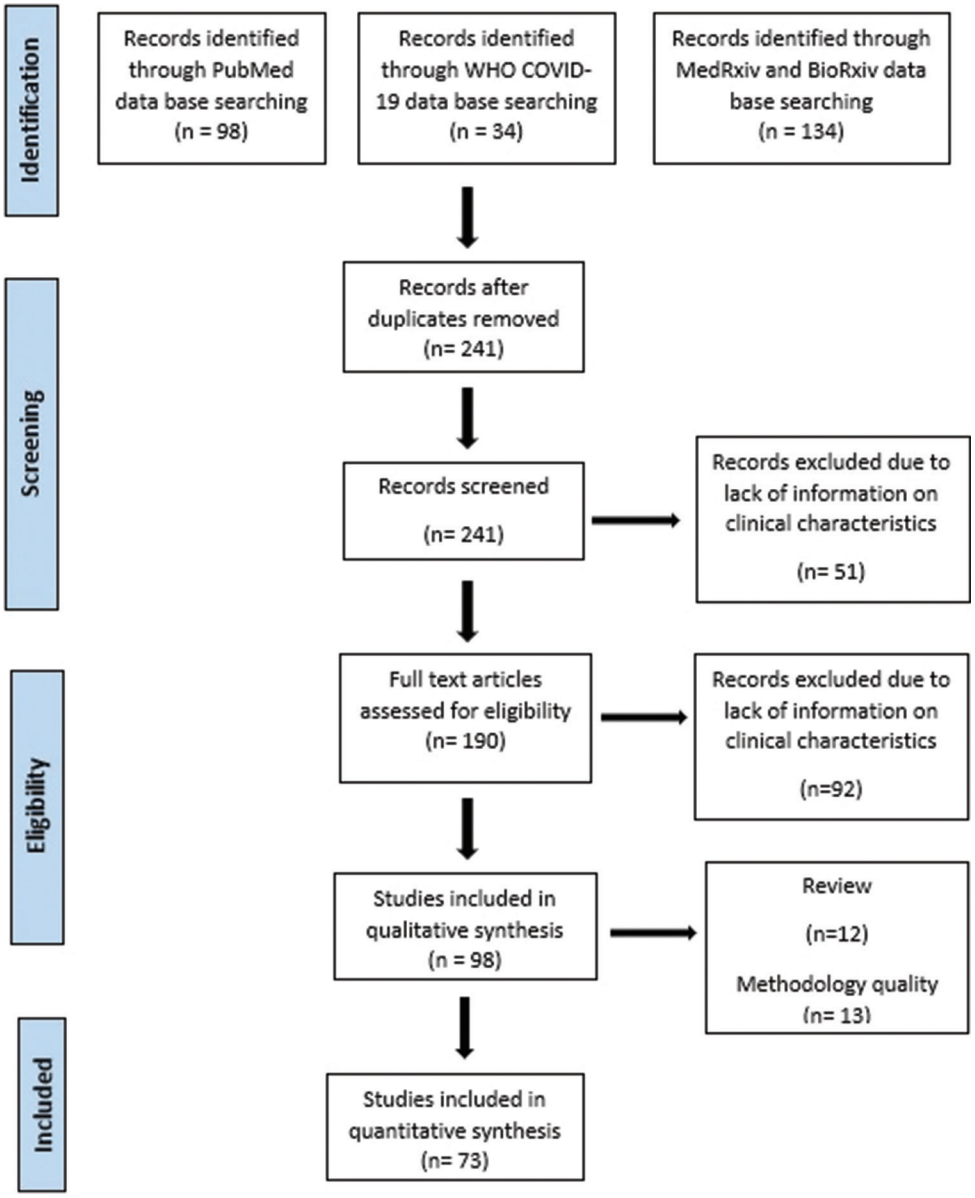

Figure 1: Flow diagram of the number of studies screened and included in the study

Table 1: Incidence of demographical and comorbidities

Variable	*n*	Mean±SE	95% CI
Age	10,391	44.72±1.90	40.92-48.52
Male	5491	75.45±15.85	43.85-107.05
Female	4988	66.35±12.96	40.49-92.20
Deaths	615	16.62±8.55	−s0.419-33.66
Comorbidities			
Hypertension	1702	23.97±5.06	13.86-34.07
Diabetes	839	11.81±2.47	6.88-16.75
Cardiovascular disease	474	6.67±1.31	4.04-9.30
Lung disease	236	3.32±0.842	1.64-5.004
Liver disease	235	3.29±1.26	0.782-5.80

Mean of age was represented as years; mean data of male, female, deaths, hypertension, diabetes, cardiovascular disease, lung disease and liver disease were represented as number of patients. N: Number of patients, SE: Standard error, CI: Confidence intervals

disease (6.67±, 95% CI: 4.04–9.30) were more common in these patients [Figure 2].

Clinical presentation

We found that the main clinical symptoms of COVID-19 patients were fever (119.86 ± 24.42, 95% CI: 71.14–168.58), chillness (6.31 ± 3.00, 95% CI: 0.32–12.31), dry cough (91.02 ± 19.55, 95% CI: 52.00–130.05), fatigue (41.76 ± 11.02, 95% CI: 19.76–63.77), and dyspnoea (24.59 ± 5.94, 95% CI: 12.72 - 36.46); all symptoms and distribution are reported in Table 2 and Figure 3.

Laboratory findings

The laboratory findings of the patients showed decreased white blood cell count (16.06 ± 5.07, 95% CI: 5.95 -26.18), decreased neutrophil count (5.54 ± 1.93, 95% CI: 1.69–

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9.40), increased lymphocyte count (6.91 ± 3.25, 95% CI: 0.56–1.51) and decreased haemoglobin levels (5.67 ± 3.14, 95% CI: −0.59–11.94), and total data regarding laboratory results of COVID-19 patients is reported in Table 3 and Figures 4 and 5.

Table 2: Incidence of clinical manifestations of COVID-19

Variable	*n*	Mean±SE	95% CI
Fever	8 346	119.86±24.42	71.14-168.58
Dry cough	6 340	91.02±19.55	52.00-130.05
Fatigue	2 906	41.76±11.02	19.76-63.77
Dyspnea	1 708	24.59±5.94	12.72-36.46
Myalgia	1 604	22.78±5.21	12.38-33.18
Sputum production	1 488	21.39±8.12	5.18-37.60
Headache	1 036	14.94±4.15	6.65-23.23
Sore throat	885	12.66±4.03	4.62-20.70
Diarrhea	752	10.79±2.71	5.37-16.21
Nasal fluid	530	7.52±5.36	−3.17-1.40
Chills	436	6.31±3.00	0.32-12.31
Chest pain	351	4.94±1.48	1.98-7.89
Body pain	316	4.57±2.56	−0.53-9.69
Nasal congestion	289	4.17±1.60	0.97-7.37
Anorexia	288	4.17±1.68	0.81-7.53
Nausea	286	4.14±1.47	1.20-7.08
Vomit	266	3.82±1.43	0.95-6.69
Dizziness	127	1.82±0.68	0.45-3.19
Tachypnea	104	1.49±0.89	−0.28-3.26
Confusion	77	1.11±0.51	0.09-2.13
Hemoptysis	66	0.95±0.34	0.27-1.63
Loss of appetite	48	0.69±0.30	0.91-1.30
Conjunctival congestion	47	0.68±0.40	−0.13-1.49
Swelling tonsils	35	0.50±0.45	−0.39-1.40
Constipation	3	0.01±0.01	−0.01-0.04

Mean data of clinical manifestations were represented as number of patients. N: Number of patients, SE: Standar error, CI: Confidence s

Chest CT findings

In the chest CT findings, it was found that the pneumonia was bilateral (46.5 ± 11.60, 95% CI: 23.37 -69.62), compromised in the right lung (1.13 ± 0.64, 95% CI: −0.14–2.41), involving predominantly lower lobe and upper lobe and peripheral distribution; total data incidence of chest CT lesions distribution is shown in Table 4 and Figure 6.

Ground-glass opacity (62.23 ± 18.82, 95% CI: 24.74–99.72), patchy lesions (21.48 ± 12.36, 95% CI: −3.13–46.11) and consolidation (18.67 ± 9.18, 95% CI: 0.37–36.96) were the most frequent chest CT findings; total data incidence of chest CT findings is shown in Table 5 and Figure 7.

The most indicated medicines of COVID-19

By summarising clinical symptoms, laboratory findings, chest CT scan and comorbidities, we constructed an epidemiological profile of COVID-19 according to our statistical analysis [Table 6].

The repertorisation is shown in Table **7**. Other repertorisations are included in the supplementary material [Supplementary Tables 1-4]. Finally, a total of 37 symptoms were selected and evaluated for repertorisation according to the epidemiological profile of COVID-19. A total of 1684 medicines coincided with the symptoms repertorised.

According to the totality of symptoms and their intensity, we found that the *Arsenicum album* covered 94.59% of symptoms (35/37, did not cover: pain, body, all over and chest, inflammation, lungs, pneumonia and bronchopneumonia) with high intensity (3.108 ± 0.228, 95% CI: 2.64–3.57) and total intensity of 115.

Table 3: Incidence of laboratory tests of COVID-19 patients

Variable	*n*	Mean±SE	95% CI
White blood cell count (×10⁹/L, normal range 4-9·9)		3.90±0.31	3.27-4.54
Increased	352	4.82±1.16	2.49-7.15
Decreased	1173	16.06±5.07	5.95-26.18
Neutrophil count (×10⁹/L, normal range 2.0-6·3)		2.02±0.26	1.49-2.55
Increased	505	7.20±3.26	0.70-13.71
Decreased	2720	5.54±1.93	1.69-9.40
Lymphocyte count (×10⁹/L, normal range 1·1-3·2)		1.03±0.23	0.561-1.51
Increased	523	6.91±3.25	0.43-13.40
Decreased	405	38.29±11.48	15.41-61.18
Hemoglobin (g/dL, normal range 11.5-17.5)		6.47±1.96	2.56-10.38
Increased	20	0.27±0.24	−0.21-0.766
Decreased	414	5.67±3.14	−0.59-11.94
Platelets count (×10⁹/L, normal range 150,000-300,000)		94.59±10.83	72.99-116.19
Increased	47	0.64±, 0.29	0.05-1.23
Decreased	669	9.16±4.46	0.25-18.07
D-dimer (mg/L, normal range 0.0-0.3)		0.20±0.03	0.13-0.27
Increased	1148	15.72±5.37	5.01-26.43
Decreased	44	1.97±1.82	−1.66-5.61

Mean data of increased and decreased were described as number of patients. N: Number of patients, SE: Standar error, CI: Confidence intervals

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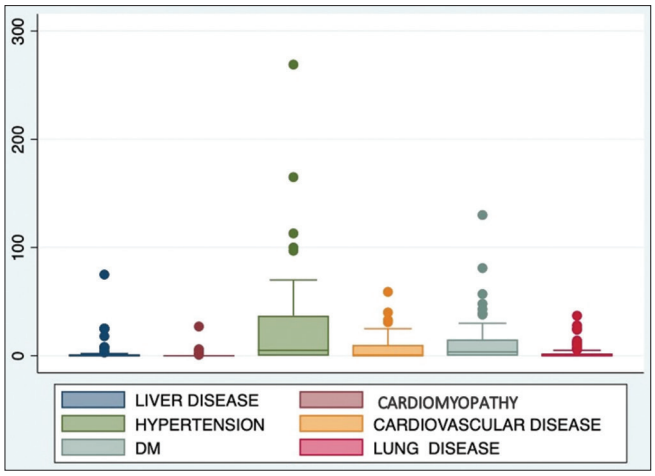

Figure 2: Box plot of the incidence of comorbidities

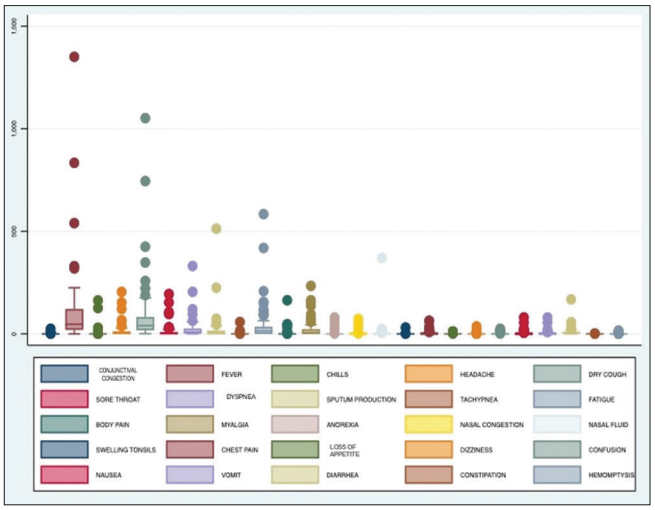

Figure 3: Box plot of the incidence of symptoms outcomes

Table 4: Incidence of chest computed tomography lesions distribution

Variable	*n*	Mean±SE	95% CI
Pneumonia			
Unilateral	1090	14.34±6.22	1.94-26.73
Bilateral	3534	46.5±11.60	23.37-69.62
Predominant side			
Right	84	1.13±0.64	−0.14-2.41
Left	64	0.86±0.56	−0.26-1.99
Involved lung zones			
Upper lobe	540	7.10±7.89	−0.27-14.48
Middle lobe	195	2.56±1.64	−0.71-5.84
Lower lobe	1089	14.32±7.89	−1.40-30.05
Predominant distribution			
Anterior	9	0.11±0.11	−0.11-0.35
Posterior	4	0.53±0.53	−0.53-1.61
Central	7	0.92±0.070	−0.04-0.23
Peripheral	160	2.10±1.11	−0.12-4.33

Mean data were described as number of patients. N: Number of patients, SE: Standar error, CI: Confidence intervals

Table 5: Incidence of chest computed tomography findings

Variable	*n*	Mean±SE	95% CI
Ground glass opacity	4730	62.23±18.82	24.74-99.72
Patchy	1633	21.48±12.36	−3.13-46.11
Consolidation	1419	18.67±9.18	0.37-36.96
Pleural effusion	43	0.56±0.28	0.001-1.12
Nodules	22	0.28±0.17	−0.52-0.63
Lymphadenopathy	11	0.14±0.89	−0.33-0.32
Pericardial effusion	3	0.34±0.28	−0.03-0.11

Mean data were described as number of patients. N: Number of patients, SE: Standar error, CI: Confidence intervals

Bryonia alba covered 91.89% of symptoms (34/37, did not cover: appetite, defective, loss anorexia; heart and circulation, thrombosis and heart and circulation, embolism) with high intensity (3.108 ± 0.218, 95% CI: 2.66–3.55) and total intensity of 115.

Phosphorus covered 91.89% of symptoms (34/37, did not cover: respiration, difficulty and pain, during: Chest, in; pain, body, all over; and chest, inflammation, lungs, pneumonia, apex, upper) with high intensity (3.108 ± 0.200, 95% CI: 2.70–3.51) and total intensity of 109, total statistical analysis of symptoms and their intensity from the most indicated medicines list for COVID-19 are shown in Table 8 and Figure 8.

Discussion

In this study, we analysed 73 studies that happened from December 2019 to March 2020, counted numerous laboratory findings and radiological images. Clinical data of 11,139 patients' clinical data was reviewed to get a complete out-print of COVID_19. A wide variety of clinical presentations was observed in COVID_19, ranging from asymptomatic to critical states. Adults with various comorbidities including hypertension, diabetes, chronic kidney diseases and cardiovascular disease were more vulnerable than children.[32,96]

This study summarised general symptoms of COVID-19 which included fever, chilliness, headache, dry cough, sore throat, chest pain, dyspnoea, anorexia and malaise. Furthermore, nausea, vomiting, and diarrhoea were obvious in some patients. In the recent past, researchers reported diarrhoea in Middle East respiratory syndrome-CoV and SARS-CoV in 30% and 10.6% of patients, respectively. Some other researchers indicated that SARS-CoV-2 has an increased affinity to angiotensin-converting enzyme 2 in the intestine which indicates gastrointestinal symptoms also should be considered in diagnosing COVID-19.[97,98]

Haematological reports showed leucocytopenia, neutropenia, decreased haemoglobin, thrombocytopenia and elevated D-dimer. These findings suggest that COVID-19 may interfere with haematopoiesis. The inflammatory response initiated by SARS-CoV-2 may facilitate disseminated intravascular coagulation which reflects the severity of COVID-19.[99-101]

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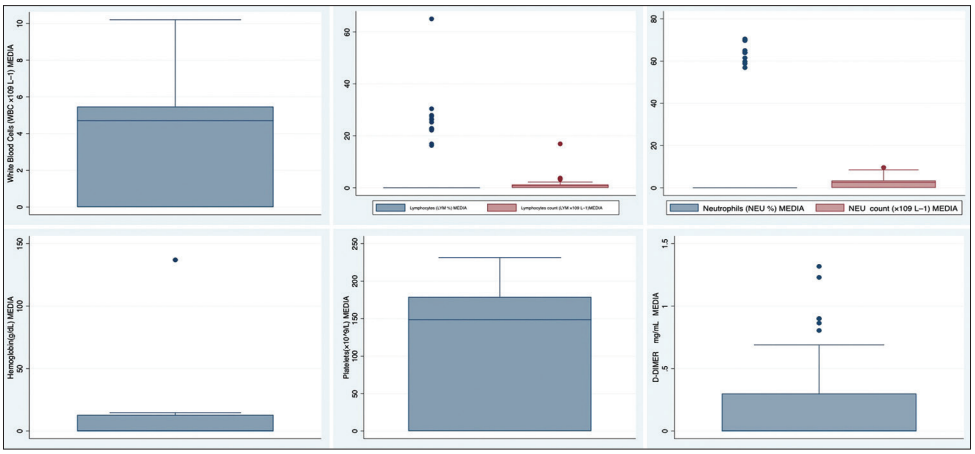

Figure 4: Box plot of the incidence of laboratory tests of COVID-19 patients. White blood cells count (×10⁹/L), lymphocyte count (×10⁹/L), neutrophil count (×10⁹/L), haemoglobin (g/dL), platelets count (×10⁹/L) and D-dimer (mg/L)

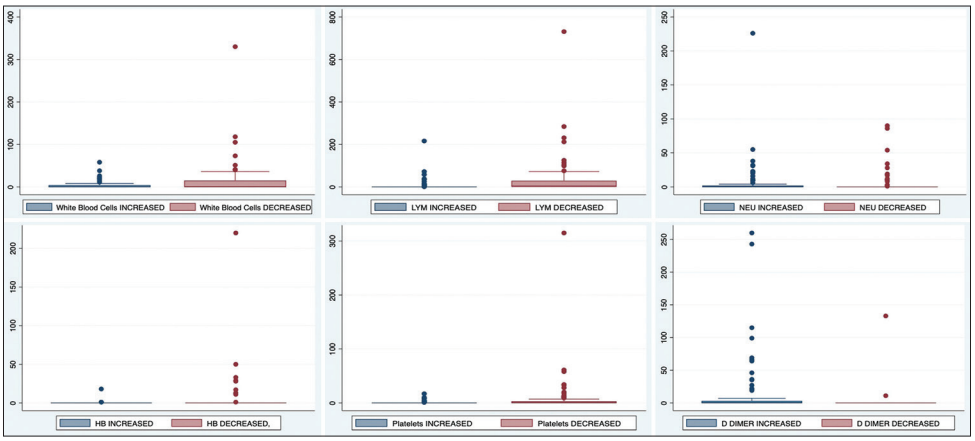

Figure 5: Box plot of the incidence of increased and decreased laboratory results of COVID-19 patients. White blood cells, lymphocyte, neutrophil, haemoglobin, platelets and D-dimer

Table 6: The clinical profile of COVID-19

Clinical symptoms	Laboratory findings	Chest CT scan	Comorbidities
Fever		Lesion distribution	
Chillness		Pneumonia	
Headache	White blood cells count	Bilateral	
Nasal fluid	<4.0×10⁹/L	Predominant side	
Nasal congestion	Neutrophils count	Right	Hypertension
Sore throat	<2.0×10⁹/L	Involved lung zones	
Dry cough	Hemoglobin	Upper lobe	Diabetes
Sputum production	<11.5 g/dL	Lower lobe	
Chest pain	Platelets count	Predominant distribution	Cardiovascular disease
Dyspnea	<150,000 (x10⁹/L)	Peripheral	
Nausea	D-dimer	Findings	
Vomit	>0.3 (mg/L)	Ground glass opacity	
Diarrhea		Patchy	
Anorexia		Consolidation	
Body pain			
Fatigue			
Myalgia			

CT: Computed tomography

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Table 7: Repertorization of the clinical profile of COVID-19

Síntomas : 37 Remedios : 1684 Filtros : Normal

Remedy	Ars	Bry	Phos	Sulph	Puls	Lyc	Acon	Nux-v	Bell	Calc	Merc	Rhus-t	Kali-c	Lach	Ant-t	Ip	Iod	Arn	Sep
Totality	115	115	115	109	104	102	101	101	100	98	98	95	95	92	92	89	88	87	87
Symptoms Covered	35	34	34	32	28	30	31	30	29	29	29	29	27	30	28	28	30	30	25
Kingdom																			
[Complete] [Mind]FEAR:Disease, of: (183)	3	1	4	3	3	1	3	4		4	1	1	4	3	2		1	3	3
[Complete] [Mind]FEAR:Death, of: (283)	4	4	4	2	4	3	4	4	4	4	4	4	4	4	3	4	3	4	2
[Complete] [Mind]ANXIETY:Health, about: (312)	4	3	4	4	4	3	4	4	4	4	3	4	3	4	3	3	3	4	4
[Complete] [Fever, Heat]CHILL:With: (175)	4	3	3	4	4	3	4	4	4	4	4	4	3	1	3	3	3	3	4
[Complete] [Fever, Heat]REMITTENT: (90)	4	4	2	3	4	3	4	3	4	1	4	4	2	3	3	4		3	1
[Complete] [Cough]DRY: (566)	4	4	4	4	4	4	4	4	4	4	4	4	4	4	3	4	4	4	4
[Complete] [Head]PAIN, HEADACHE: (1303)	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	3	3	3	4
[Complete] [Throat]INFLAMMATION, SORE THROAT: (562)	4	4	4	4	4	4	4	4	4	4	4	4	3	4	3	4	4	1	4
[Complete] [Rectum]DIARRHEA: (1003)	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
[Complete] [Nose]CORYZA:Discharge:With, fluent: (411)	4	3	2	4	4	4	4	4	4	4	4	3	4	4	4	4	3		3
[Complete] [Nose]OBSTRUCTION, STOPPED SENSATION: (526)	4	4	4	4	4	4	1	4	3	4	3	4	4	4	3	4	4	1	4
[Complete] [Respiration]DIFFICULT: (879)	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
[Complete] [Respiration]DIFFICULT:Pain, during:Chest, in: (57)	1	4		3				2			1							1	
[Complete] [Respiration]SHORT: (188)	4	4	4	4	3	4	4	3	4	3	4	4	3	3	4	4	2	4	4
[Complete] [Respiration]DIFFICULT:Bronchial complaints, with: (102)	4	3	3	3	4		1	1	1	3	3	3		4	3	4	4	2	4
[Complete] [Stomach]NAUSEA: (1011)	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
[Complete] [Stomach]VOMITING: (866)	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
[Boericke] [Stomach]APPETITE:Defective, lost (anorexia): (56)	3		2	2	3	3		3		2		3				3		2	2
[Complete] [Generalities]PAIN:Body, all over: (91)		3				1		3				1		3				4	
[Complete] [Generalities]PAIN:Muscles: (488)	4	4	4	4	4	4	4	4	4	4	4	4	4	3	4	2	3	4	4
[Complete] [Generalities]WEARINESS: (843)	4	4	4	4	4	4	3	4	4	4	4	4	4	4	3	4	3	4	4
[Complete] [Heart & Circulation]THROMBOSIS: (55)	3		1				1					1		1		1		1	
[Complete] [Heart & Circulation]EMBOLISM: (26)	1		3				1		3					1				3	
[Complete] [Blood]ANEMIA: (330)	4	4	4	4	4	3	4	4	4	4	4	3	4	3	4	3	2	3	4
[Complete] [Heart & Circulation]INFLAMMATION:Bloodvessels, phle...	4	4	3	4	4	3	4	2	3	4	3	4	3	4	3		3	4	3
[Complete] [Chest]INFLAMMATION:Lungs, pneumonia: (475)	4	4	4	4	4	4	4	4	3	4	4	4	4	4	4	3	4	4	4
[Complete] [Chest]INFLAMMATION:Lungs, pneumonia:Right: (41)	1	4	3	3		3			3	2	3		3	1	3		2		
[Complete] [Chest]INFLAMMATION:Lungs, pneumonia:Base, lower: (...	1	1	2	2		3					3	1	3				2	1	
[Complete] [Chest]LUNGS:Apex, upper: (94)	4	1	3	3	3		2	1	2	4				1			2		2
[Complete] [Chest]INFLAMMATION:Lungs, pneumonia:Apex, upper: (...	1	1					2	1		2							1		
[Complete] [Chest]INFLAMMATION:Lungs, pneumonia:Bronchopneu...		3	3	3	3	4	3	3	3		1		3		4	2	2		
[Complete] [Chest]INFLAMMATION:Consolidating, lungs: (23)	1	3	3	1		3				1			3		1	2	4		
[Complete] [Chest]INFLAMMATION:Croupous:Lungs: (53)	1	3	3	3		3	3		3		3	1	3	1	3	1	3	1	
[Complete] [Chest]BRONCHIAL TUBES: (471)	4	4	4	4	4	4	4	4	4	4	4	4	3	3	4	4	3	3	4
[Complete] [Chest]INFLAMMATION:Acute:Bronchial tubes: (40)	3	4	4	3	3	3	4	3	4	1	3			1	1	1	1		
[Complete] [Chest]DROPSY: (170)	4	4	3	3	3	4	1		1	3	3	3	4	4	4	3	3	1	3
[Complete] [Chest]INFLAMMATION:Epidemic:Bronchial tubes: (19)	4	3	4		3		4	4	3			3				3		3	

Our study upholds that ground-glass opacity, patchy lesions and consolidations are the distinctive radiological marks in COVID-19 patients, which is consistent with previous studies.[102-104] We also observed both the upper and lower lobes are involved along with the peripheral lung field; this indicates patients with COVID-19 symptoms should undergo computed tomography (CT) test as an alternative to real-time polymerase chain reaction to confirm.[105]

Recently, several studies have demonstrated the successful application of the *Genus epidemicus* concept in the epidemics of chikungunya and dengue.[7-10] Following the same theory, another successful study was conducted in rabbits.[106,107] Considering the initial symptoms, the Ministry of AYUSH, India, suggested official guidelines for homoeopathic practitioners which are consistent with our findings.[19,108] A

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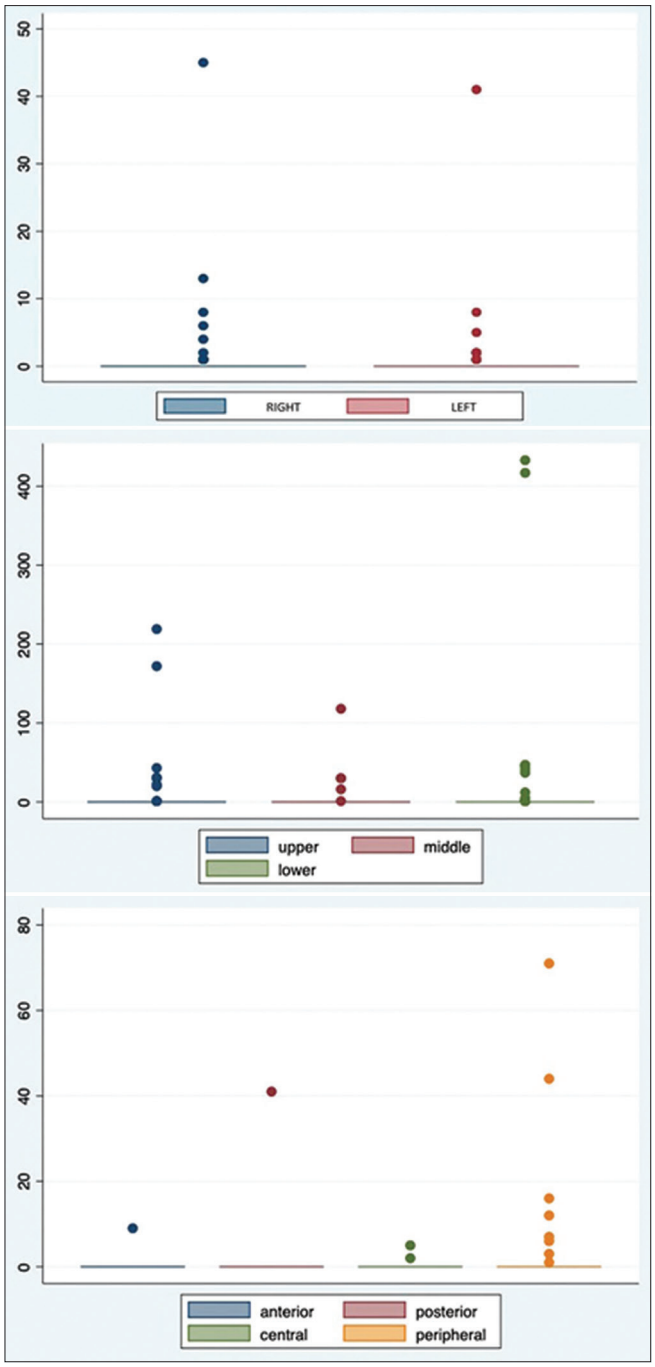

Figure 6: Box plot of the incidence of chest CT lesions distribution

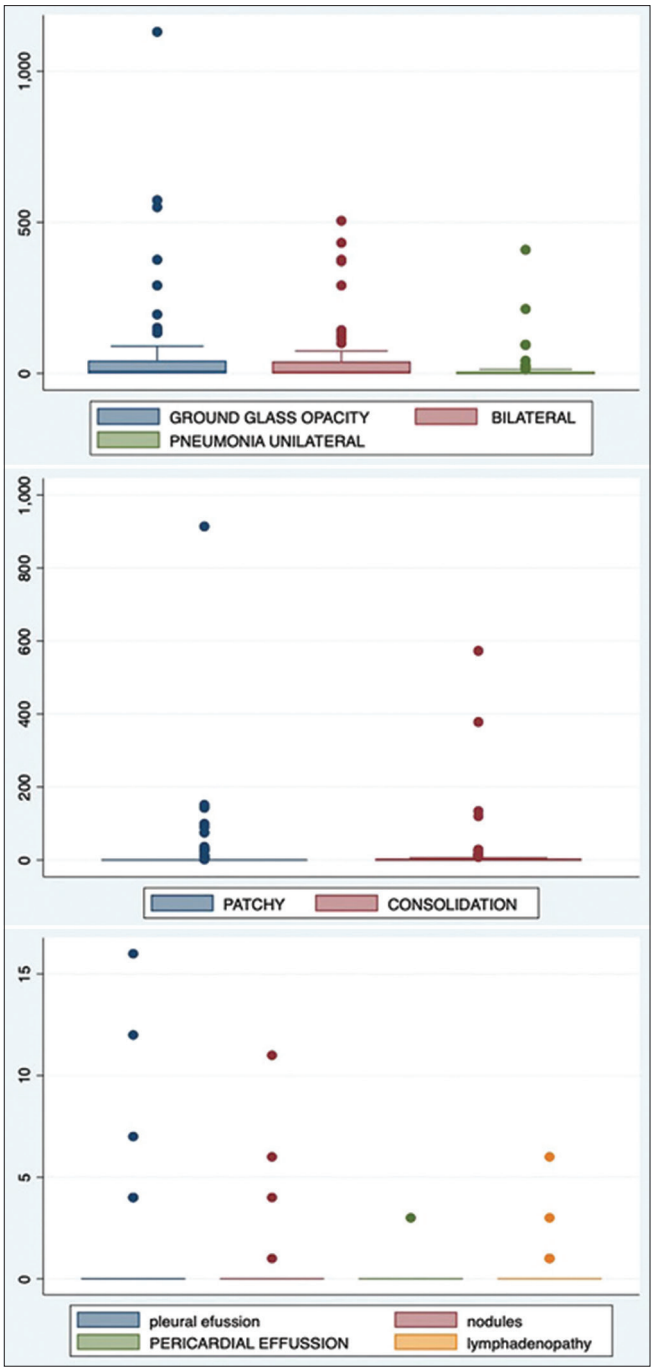

Figure 7: Box plot of the incidence of chest CT findings

case study of 18 symptomatic COVID-19 patients in Hong Kong reported the successful use of *Gelsemium sempervirens* in 12 patients, *Bryonia alba* in four patients, *Eupatorium perfoliatum* in one patient, and *Arsenicum album* in only one patient.[109]

To the best of our knowledge, this current epidemiological study is a unique one to determine Hahnemann's *Genus epidemicus* of COVID-19 [Table 6], as this study considered and repertorised all clinical symptoms along with laboratory tests and radiological findings. The mental symptoms were not clear in COVID-19, till the time this study was conducted to fulfil the homoeopathic approach. We found *Bryonia alba, Arsenic album, Phosphorus, Sulphur, Pulsatilla nigre, Lycopodium clavatum, Aconitum napellus, Nux vomica, Belladonna, Calcarea carbonica, etc.*, are prioritised in the list of the most indicated medicines for COVID-19. The selection of individualised homoeopathic medicine is based on a patient's presenting clinical manifestations and individualised characteristics including mental symptoms.[15] Moreover, the peculiar, rare and strange symptoms of all stages of COVID-19 and patients of different geographical regions should be

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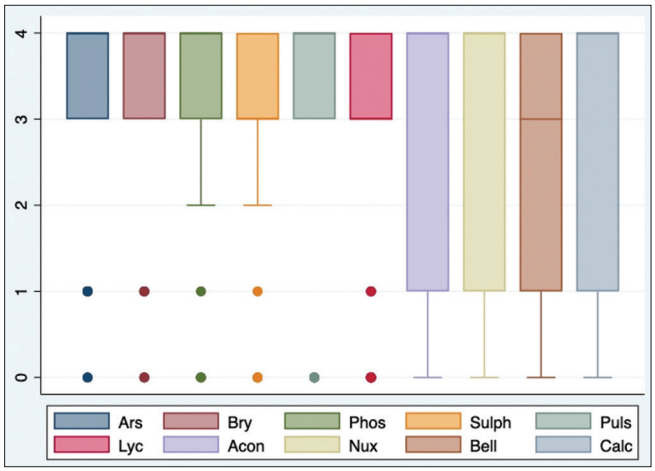

Figure 8: Box plot of the intensity of symptoms of the most indicated medicines list for COVID-19

Table 8: Genus epidemicus list

	n (%)	Mean±SE	95% CI
Ars	35 (94.59)	3.108±0.228	2.64-3.57
Bry	34 (91.89)	3.108±0.218	2.66-3.55
Phos	34 (91.89)	3.108±0.200	2.70-3.51
Sulph	32 (86.48)	2.945±0.229	2.48-3.41
Puls	28 (75.67)	2.810±0.273	2.25-3.36
Lyc	30 (81.08)	2.756±0.252	2.24-3.26
Acon	31 (83.78)	2.729-0.264	2.19-3.26
Nux	30 (81.08)	2.729-0.264	2.19-3.26
Bell	29 (78.37)	2.702-0.268	2.15-3.24
Calc	29 (78.37)	2.648-0.277	2.08-3.21

Mean data were described as intensity of total of symptoms. 1: Low intensity, 2: Medium intensity, 3: High intensity, 4: Very high intensity, N: Number of patients, SE: Standar error, CI: Confidence intervals

considered.[16] Unfortunately, these individualised features with mental symptoms were not documented in the COVID-19 studies included in the review. However, to satisfy our quest based on Homoeopathy perspective of case description, we added 'fear of disease', 'fear of death' and 'anxiety about health' as common mental symptoms; [Table 6] and as expected, found a shuffle in the list of medicines [Figure 7].

We accept that there are limitations of this study including a lack of case studies and a control trial study to prove this theory. Furthermore, homoeopathic system of natural medicine is still facing criticism due to deficient work in identifying the bioactive agent and its mode of action pathway.

Conclusion

A list of homoeopathic medicines identified in the paper might be helpful in the treatment of COVID-19 patients. Case studies and randomised clinical trials based on this analysis are welcome for further confirmation. We also raise our hands in favour of using homoeopathic medicines along with conventional medicines for a holistic approach.

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Conflicts of interest

None declared.

References

1. Li Q, Guan X, Wu P, Wang X, Zhou L, Tong Y, *et al.* Early transmission dynamics in Wuhan, China, of novel coronavirus-infected pneumonia. N Engl J Med 2020;382:1199-207.
2. WHO. Novel Coronavirus – China. 2020. Available from: https://www.who.int/csr/don/12 january 2020 novel coronavirus china/en/, April 4th, 2021. [Last accessed on 2021 Apr 25].
3. Zhu N, Zhang D, Wang W, Li X, Yang B, Song J, *et al*. A novel coronavirus from patients with pneumonia in China, 2019. N Engl J Med 2020;382:727-33.
4. Bandyopadhyay B, Das S, Sengupta M, Saha C, Das KC, Sarkar D, *et al.* Decreased intensity of Japanese encephalitis virus infection in chick chorioallantoic membrane under influence of ultradiluted Belladonna extract. Am J Infect Dis 2010;6:24-8.
5. Bandyopadhyay B, Das S, Sengupta M, Saha C, Bhattacharya N, Chinta R, *et al.* Suckling mice of 'Belladonna 200' fed mothers evade virulent Nakayama strain Japanese encephalitis virus infection. Int J Microbiol Res 2011;2:252-7.
6. Gadugu S, Nyapati SR, Sastry GL. An open observational study on efficacy of miasmatic prescription in the prevention of Japanese encephalitis. Homeopathy 2014;103:78.
7. de Souza Nunes LA. Contribution of homeopathy to the control of an outbreak of dengue in Macaé, Rio de Janeiro. Int J High Dilution Res 2008;7:186-92.
8. Marino R. Homeopathy and collective health: The case of dengue epidemics. Int J High Dilution Res 2008;7:179-85.
9. Rejikumar R, Dinesh RS. Chikungunya Fever Epidemic 2006 Study Report; Government. Thiruvanathapuram: Homoeopathic Medical College; 2006.
10. Nair KR, Gopinadhan S, Sreedhara KT, Kumar BJ, Aggarwal A, Varanasi R, *et al.* Homoeopathic genus epidemicus 'Bryonia alba' as a prophylactic during an outbreak of chikungunya in India: A cluster-randomised, double-blind, placebo-controlled trial. Indian J Res Homoeopathy 2014;8:160-5.
11. Bracho G, Varela E, Fernández R, Ordaz B, Marzoa N, Menéndez J, *et al.* Large-scale application of highly-diluted bacteria for Leptospirosis epidemic control. Homeopathy 2010;99:156-66.
12. Marino R. Flu pandemics: Homeopathic prophylaxis and definition of the epidemic genius. Int J High Dilution Res 2009;8:100-9.
13. Vickers AJ, Smith C. Homoeopathic Oscillococcinum for preventing and treating influenza and influenza-like syndromes. Cochrane Database Syst Rev. 2006;:CD001957. Published 2006. doi:10.1002/14651858.CD001957.pub3.
14. Mathie RT, Frye J, Fisher P. Homeopathic Oscillococcinum® for preventing and treating influenza and influenza-like illness. Cochrane Database Syst Rev 2015;1:CD001957.
15. Hahnemann S. Organon of Medicine. 6th ed. New Delhi: B Jain Publishers; 2004.
16. Kent JT. Lectures on Homoeopathic Philosophy. 1st ed. New Delhi: B Jain Publishers; 1977.
17. Milgrom LR. Genus epidemicus: Are notions of entanglement relevant to the homeopathic understanding of epidemic disease? Forsch Komplementärmed Res Complement Med 2016;23:290-300.
18. Milgrom L. Genus epidemicus: Are quantum-based metaphors necessary for the homeopathic understanding of epidemic disease? Homeopathy 2018;107:55-78.
19. AYUSH. Advisory for Corona Virus. Delhi: AYUSH; 2020. Available from: https://pib.gov.in/PressReleasePage.aspx?PRID=1600895. [Last accessed on 2021 Apr 30].
20. Slim K, Nini E, Forestier D, Kwiatkowski F, Panis Y, Chipponi J. Methodological index for non-randomized studies (minors): Development and validation of a new instrument. ANZ J Surg

[Downloaded free from http://www.ijrh.org on Tuesday, May 10, 2022, IP: 14.139.55.162]

2003;73:712-6.
21. Hompath Zomeo Repertory Software Version 13.7.2®. Available from: https://hompath.com/zomeo. [Last accessed on 2021 May 04].
22. Radar 10 ®, Homeopathic Software. Available from: http://www.archibel.com/radar10.html, [Last accessed on 2021 May 10].
23. Zhang MQ, Wang XH, Chen YL, Zhao KL, Cai YQ, An CL, *et al*. Analysis of clinical features of 29 patients with 2019 novel coronavirus pneumonia. Zhonghua Jie He He Hu Xi Xi Ji Bing Za Zhi 2020;43:215-8.
24. Liu M, He P, Liu HG, Wang XJ, Li FJ, Chen S, *et al*. Analysis of clinical features of 29 patients with 2019 novel coronavirus pneumonia. Zhonghua Jie He He Hu Xi Xi Ji Bing Za Zhi 2020;43:209-14.
25. Chen L, Liu HG, Liu W, Liu J, Liu K, Shang J, *et al*. Analysis of clinical features of 29 patients with 2019 novel coronavirus pneumonia. Zhonghua Jie He He Hu Xi Xi Ji Bing Za Zhi 2020;43:203-8.
26. Xu X, Wu X, Jiang X, Xu K, Ying L, Ma C, *et al.* Clinical findings in a group of patients infected with the 2019 novel coronavirus (SARS-Cov-2) outside of Wuhan, China: Retrospective case series. BMJ 2020;368:M606.
27. Duan YN, Qin J. Pre- and posttreatment chest CT findings: 2019 novel coronavirus (2019-nCoV) pneumonia. Radiology 2020;295:21.
28. Wang Z, Chen X, Lu Y, Chen F, Zhang W. Clinical characteristics and therapeutic procedure for four cases with 2019 novel coronavirus pneumonia receiving combined Chinese and Western medicine treatment. Biosci Trends 2020;14:64-8.
29. Song F, Shi N, Shan F, Zhang Z, Shen J, Lu H, *et al.* Emerging 2019 novel coronavirus (2019-nCoV) pneumonia. Radiology 2020;295:210-7.
30. Chen N, Zhou M, Dong X, Qu J, Gong F, Han Y, *et al.* Epidemiological and clinical characteristics of 99 cases of 2019 novel coronavirus pneumonia in Wuhan, China: A descriptive study. Lancet 2020;395:507-13.
31. Huang C, Wang Y, Li X, Ren L, Zhao J, Hu Y, *et al.* Clinical features of patients infected with 2019 novel coronavirus in Wuhan, China. Lancet 2020;395:497-506.
32. Chan J, Yuan S, Kok K, To K, Chu H, Yang J, *et al*. A familial cluster of pneumonia associated with the 2019 novel coronavirus indicating person-to-person transmission: A study of a family cluster. Lancet 2020;395:514-23.
33. Qian G, Yang N, Ding F, Ma A, Wang Z, Shen Y, *et al.* Epidemiologic and clinical characteristics of 91 hospitalized patients with COVID-19 in Zhejiang, China: A retrospective, multi-centre case series. QJM Int J Med 2020;113:474-81.
34. Mo P, Xing Y, Xiao Y, Deng L, Zhao Q, Wang H, *et al*. Clinical characteristics of refractory COVID-19 pneumonia in Wuhan, China [published online ahead of print, 2020 Mar 16]. Clin Infect Dis. 2020; ciaa270. doi:10.1093/cid/ciaa270.
35. Liu K, Fang YY, Deng Y, Liu W, Wang MF, Ma JP, *et al.* Clinical characteristics of novel coronavirus cases in tertiary hospitals in Hubei Province. Chin Med J (Engl) 2020;133:1025-31.
36. Ye G, Pan Z, Pan Y, Deng Q, Chen L, Li J, *et al.* Clinical characteristics of severe acute respiratory syndrome coronavirus 2 reactivation. J Infect 2020;80:e14-7.
37. Hu, Z, Song, C, Xu, C, Jin, G, Chen, Y, Xu, X. *et al.* Clinical characteristics of 24 asymptomatic infections with COVID-19 screened among close contacts in Nanjing, China. Science China Life Sciences. 2020; 63:, 706-711.
38. Chang, Lin M, Wei L, Xie L, Zhu G, Dela Cruz CS, *et al.* Epidemiologic and clinical characteristics of novel coronavirus infections involving 13 patients outside Wuhan, China. JAMA 2020;323:1092-3.
39. Wang D, Hu B, Hu C, Zhu F, Liu X, Zhang J, *et al.* Clinical characteristics of 138 hospitalized patients with 2019 novel coronavirus-infected pneumonia in Wuhan, China. JAMA 2020;323:1061-9.
40. Zhang J, Dong X, Cao Y, Yuan Y, Yang Y, Yan Y, *et al.* Clinical characteristics of 140 patients infected with SARS-CoV-2 in Wuhan, China. Allergy 2020;75:1730-41.
41. Wu J, Liu J, Zhao X, Liu C, Wang W, Wang D, *et al.* Clinical characteristics of imported cases of coronavirus disease 2019 (COVID-19) in Jiangsu Province: A multicenter descriptive study. Clin Infect Dis 2020;71:706-12.
42. Huang Y, Tu M, Wang S, Chen S, Zhou W, Chen D, *et al.* Clinical characteristics of laboratory confirmed positive cases of SARS-CoV-2 infection in Wuhan, China: A retrospective single center analysis. Travel Med Infect Dis 2020;36:101606.
43. Guan W, Ni Z, Hu Y, Liang W, Ou C, He J, *et al.* Clinical characteristics of coronavirus disease 2019 in China. N Engl J Med 2020;382:1708-20.
44. COVID-19 National Emergency Response Center, Epidemiology and Case Management Team, Korea Centers for Disease Control and Prevention. Early epidemiological and clinical characteristics of 28 cases of coronavirus disease in South Korea. Osong Public Health Res Perspect 2020;11:8-14.
45. Yang W, Cao Q, Qin L, Wang X, Cheng Z, Pan A, *et al.* Clinical characteristics and imaging manifestations of the 2019 novel coronavirus disease (COVID-19): A multi-center study in Wenzhou city, Zhejiang, China. J Infect 2020;80:388-93.
46. Zhang X, Cai H, Hu J, Lian J, Gu J, Zhang S, *et al.* Epidemiological, clinical characteristics of cases of SARS-CoV-2 infection with abnormal imaging findings. Int J Inf Dis 2020;94:81-7.
47. Zheng F, Liao C, Fan QH, Chen HB, Zhao XG, Xie ZG, *et al.* Clinical characteristics of children with coronavirus disease 2019 in Hubei, China. Curr Med Sci 2020;40:275-80.
48. Cai Q, Huang D, Ou P, Yu H, Zhu Z, Xia Z, *et al.* COVID-19 in a designated infectious diseases hospital outside Hubei Province, China. Allergy 2020;75:1742-52.
49. Ai J, Chen J, Wang Y, Liu X, Fan W, and Qu G. *et al.* The cross-sectional study of hospitalized coronavirus disease 2019 patients in Xiangyang, Hubei province. Retrieved 18 June 2021, medRxiv 2020.02.19.20025023; doi: 10.1101/2020.02.19.20025023.
50. Feng Z, Yu Q, Yao S, Luo L, Duan J, and Yan Z. *et al*. Early Prediction of Disease Progression in 2019 Novel Coronavirus Pneumonia Patients Outside Wuhan with CT and Clinical Characteristics. medRxiv 2021:2020.02.19.20025296; doi: 10.1101/2020.02.19.20025296.
51. Liu L, Gao J, Hu W, Zhang X, Guo L, Liu C. *et al*. Clinical characteristics of 51 patients discharged from hospital with COVID-19 in Chongqing, China. medRxiv 2021:2020.02.20.20025536;, doi: 10.1101/2020.02.20.20025536.
52. Lu J, Hu S, Fan R, Liu Z, Yin X, Wang Q. *et al.* ACP risk grade: a simple mortality index for patients with confirmed or suspected severe acute respiratory syndrome coronavirus 2 disease (COVID-19) during the early stage of outbreak in Wuhan, China. medRxiv 2021:2020.02.20.20025510; 10.1101/2020.02.20.20025510.
53. Chen J, Wu L, Zhang J, Zhang L, Gong D, Zhao Y, *et al.* Deep learning-based model for detecting 2019 novel coronavirus pneumonia on high-resolution computed tomography: A prospective study. Sci Rep 2020;10:19196.
54. Guan W, Liang W, Zhao Y, Liang H, Chen Z, Li Y, *et al.* Comorbidity and its impact on 1,590 patients with COVID-19 in China: A nationwide analysis. Eur Respir J 2020;55:2000547.
55. Mao L, Jin H, Wang M, Hu Y, Chen S, He Q, *et al.* Neurologic manifestations of hospitalized patients with coronavirus disease 2019 in Wuhan, China. JAMA Neurol 2020;77:683-90.
56. Chen J, Wu L, Zhang J, Zhang L, Gong D, Zhao Y, *et al*. Deep Learning Based Model for Detecting 2019 Novel Coronavirus Pneumonia on High Resolution Computed Tomography: A Prospective Study. medRxiv 2020.02.25.20021568; doi: 10.1101/2020.02.25.20021568.
57. Zhang B, Zhou X, Qiu Y, Feng F, Feng J, Jia Y, *etal*. Clinical characteristics of 82 death cases with COVID-19. PLoS One 2020;15:e0235458.
58. Wang W, He J, Lie P, Huang L, Wu S, Lin Y, *et al.* The definition and risks of cytokine release syndrome-like in 11 COVID-19-infected pneumonia critically ill patients: Disease characteristics and retrospective analysis. J Infect Dis 2020;222:1444-51.
59. Liu Y, Sun W, Li J, Chen L, Wang Y, Zhang L, *et al.* Clinical features and progression of acute respiratory distress syndrome in coronavirus disease 2019. Clin Immunol 2020;215:108427.
60. Liang Y, Liang J, Zhou Q, Li X, Lin F, Deng Z, *et al.* Prevalence and clinical features of 2019 novel coronavirus disease (COVID-19) in the Fever Clinic of a teaching hospital in Beijing: A single-center, retrospective study. J Infect 2020;80:656-65.
61. Fan Z, Chen L, Li J, Tian C, Zhang Y, Huang S, *et al*. Clinical features of COVID-19 related liver damage. Clin Gastroenterol Hepatol 2020;18:1561-6.
62. Wu C, Hu X, Song J, Du C, Xu J, Yang D, *et al.* Heart Injury Signs are

[Downloaded free from http://www.ijrh.org on Tuesday, May 10, 2022, IP: 14.139.55.162]

Associated with Higher and Earlier Mortality in Coronavirus Disease 2019 (COVID-19). [doi: 10.1101/2020.02.26.20028589].
63. Xu L, Yuan J, Zhang Y, Zhang G, Lu F, Su J, *et al*. Highland of COVID-19 Outside Hubei: Epidemic Characteristics, Control and Projections of Wenzhou, China. [doi: 10.1101/2020.02.25.20024398].
64. Xu H, Huang S, Liu S, Deng J, Jiao B, Ai L, *et al*. Evaluation of the clinical characteristics of suspected or confirmed cases of COVID-19 during home care with isolation: A new retrospective analysis based on O2O. doi: https://doi.org/10.1101/2020.02.260.20028084.
65. Fu H, Li H, Tang X, Li X, Shen J, Zhou Y, *et al*. Analysis on the Clinical Characteristics of 36 Cases of Novel Coronavirus Pneumonia in Kunming, medRxiv 2020.02.28.20029173; doi: 10.1101/2020.02.28.20029173.
66. Yang P, Ding Y, Xu Z, Pu R, Li P, Yan J, *et al*. Epidemiological and Clinical Features of COVID 19 Patients with and Without Pneumonia in Beijing, China, medRxiv 2020.02.28.20028068; doi: 10.1101/2020.02.28.20028068. [pre-print].
67. Qi D, Yan X, Tang X, Peng J, Yu Q, Feng L, et al. Epidemiological and Clinical Features of 2019 nCoV Acute Respiratory Disease Cases in Chongqing Municipality, China: A Retrospective, Descriptive, Multiple Center Study, medRxiv 2020.03.01.20029397; doi: 10.1101/2020.03.01.20029397.
68. Bi Q, Wu Y, Mei S, Ye C, Zou X, Zhang Z, *et al.* Epidemiology and Transmission of COVID-19 in Shenzhen China: Analysis of 391 Cases and 1,286 of their close contacts. Lancet Infect Dis 2020;20:911-9.
69. Jin J, Bai P, He W, Wu F, Liu X, Han D, *et al.* Gender differences in patients with COVID-19: Focus on severity and mortality. Front Public Health 2020;8:152.
70. Huang Y, Yang R, Xu Y, Gong P. Clinical Characteristics of 36 Non Survivors with COVID 19 in Wuhan, China. medRxiv 2020.02.27.20029009; doi: 10.1101/2020.02.27.20029009.
71. Wu W, Xu Z, Jin Y, Pan A. Key Points of Clinical and CT Imaging Features of 2019 Novel Coronavirus (2019 nCoV) Imported Pneumonia Based on 21 Cases Analysis. medRxiv 2020.03.03.20030775; doi: 10.1101/2020.03.03.20030775.
72. Chen Z, Hu J, Zhang Z, Jiang S, Wang T, Shi Z, *et al.* Caution: Clinical Characteristics of COVID 19 Patients Are Changing at Admission, medRxiv 2020.03.03.20030833; doi: 10.1101/2020.03.03.20030833.
73. Zhang G, Hu C, Luo L, Fang F, Chen Y, Li J, *et al*. Clinical features and short-term outcomes of 221 patients with COVID-19 in Wuhan, China. J Clin Virol 2020;127:104364.
74. Cao M, Zhang D, Wang Y, Lu Y, Zhu X, Li Y, *et al*. Clinical features of patients infected with the 2019 novel coronavirus (COVID-19) in Shanghai, China. J Clin Virol 2020;127:104364.
75. Chen X, Ling J, Mo P, Zhang Y, Jiang Q, Ma Z, et al. Restoration of Leukomonocyte Counts Is Associated with Viral Clearance in COVID 19 Hospitalized Patients. medRxiv 2020.03.03.20030437; doi: 10.1101/2020.03.03.20030437.
76. Chen X, Zheng F, Qing Y, Ding S, Yang D, Lei C, *et al.* Epidemiological and clinical features of 291 cases with coronavirus disease 2019 in areas adjacent to Hubei, China: A double-center observational study. Lancet 2020;395:507-13.
77. Zhao Z, Xie J, Yin M, Yang Y, He H, Jin T, *et al*. Clinical and Laboratory Profiles of 75 Hospitalized Patients with Novel Coronavirus Disease 2019 in Hefei, China. medRxiv 2020.03.01.20029785; doi: 10.1101/2020.03.01.20029785.
78. Qiu C, Deng Z, Xiao Q, Shu Y, Deng Y, Wang H, *et al.* Transmission and clinical characteristics of coronavirus disease 2019 in 104 outside-Wuhan patients, China. J Med Virol 2020;92:2027-35. [doi: 10.1002/jmv.25975].
79. Song C, Xu J, He J, Lu Y. COVID 19 Early Warning Score: A Multi Parameter Screening Tool to Identify Highly Suspected Patients. medRxiv 2020.03.05.20031906; doi: 10.1101/2020.03.05.20031906.
80. Liu L, Liu W, Zheng Y, Jiang X, Kou G, Ding J, *et al*. A preliminary study on serological assay for severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) in 238 admitted hospital patients. Microbes Infect 2020;22:206-11.
81. Tang A, Xu W, Shen M, Chen P, Li G, Liu Y, *et al*. A Retrospective Study of the Clinical Characteristics of COVID 19 Infection in 26 Children, medRxiv 2020.03.08.20029710; doi: 10.1101/2020.03.08.20029710.
82. Liu R, Ming X, Xu O, Zhou J, Peng H, Xiang N, *et al*. Association of Cardiovascular Manifestations with In Hospital Outcomes in Patients with COVID 19: A Hospital Staff Data, medRxiv 2020.02.29.20029348; doi: 10.1101/2020.02.29.20029348.
83. Liao J, Fan S, Chen J, Wu J, Xu S, Guo Y, *et al.* Epidemiological and clinical characteristics of COVID-19 in adolescents and young adults. Innovation 2020;1:1-13.
84. Kujawski S, Wong K, Collins J, Epstein L, Killerby M, Midgley C, *et al.* First 12 Patients with Coronavirus Disease 2019 (COVID 19) in the United States, medRxiv 2020.03.09.20032896; doi: 10.1101/2020.03.09.20032896.
85. Liu J, Ouyang L, Guo P, Wu H, Fu P, Chen Y, *et al*. Epidemiological, Clinical Characteristics and Outcome of Medical Staff Infected with COVID 19 in Wuhan, China: ARetrospective Case Series Analysis, medRxiv 2020.03.09.20033118; doi: 10.1101/2020.03.09.20033118.
86. Shi Q, Zhao K, Yu J, Jiang F, Feng J, Zhao K, *et al*. Clinical Characteristics of 101 COVID 19 Nonsurvivors in Wuhan, China: A Retrospective Study, medRxiv 2020.03.04.20031039; doi: 10.1101/2020.03.04.20031039.
87. Zhang C, Gu J, Chen Q, Deng N, Li J, Huang L, Zhou, X. Clinical and epidemiological characteristics of pediatric SARS-CoV-2 infections in China: A multicenter case series. PLOS Medicine, 2020;17:e1003130. doi: 10.1371/journal.pmed.1003130.
88. Chen L, Deng C, Chen X, Zhang X, Chen B, Yu H, *et al.* Ocular manifestations and clinical characteristics of 534 cases of COVID-19 in china: A cross-sectional study. Acta Ophthalmol 2020;98:e951-9.
89. Zhao W, Yu S, Zha X, Wang N, Pang Q, Li T, *et al*. Clinical Characteristics and Durations of Hospitalized Patients with COVID 19 in Beijing: A Retrospective Cohort Study. medRxiv 2020.03.13.20035436; doi: 10.1101/2020.03.13.20035436.
90. Tabata S, Imai K, Kawano S, Ikeda M, Kodama T, Miyoshi K, *et al.* The Clinical Characteristics of COVID 19: A Retrospective Analysis of 104 Patients from the Outbreak on Board the Diamond Princess Cruise Ship in Japan, medRxiv 2020.03.18.20038125; doi: 10.1101/2020.03.18.20038125.
91. Wu Q, Xing Y, Shi L, Li W, Gao Y, Pan S, *et al.* Epidemiological and Clinical Characteristics of Children with Coronavirus Disease 2019, medRxiv 2020.03.19.20027078; doi: 10.1101/2020.03.19.20027078.
92. Luo X, Xia H, Yang W, Wang B, Guo T, Xiong J, *et al.* Characteristics of Patients with COVID 19 during Epidemic Ongoing Outbreak in Wuhan, China, medRxiv 2020.03.19.20033175; doi: 10.1101/2020.03.19.20033175.
93. Yan S, Song X, Lin F, Zhu H, Wang X, Li M, *et al.* Clinical Characteristics of Coronavirus Disease 2019 in Hainan, China, medRxiv 2020.03.19.20038539; doi: 10.1101/2020.03.19.20038539.
94. Fu H, Xu, H, Zhang, N, Xu, H, Li, Z, Chen, H, *et al.* Association between Clinical, Laboratory and CT Characteristics and RT PCR Results in the Follow up of COVID 19 Patients, medRxiv 2020.03.19.20038315; doi: 10.1101/2020.03.19.20038315.
95. Fang C, Bai S, Chen Q, Zhou Y, Xia L, Qin L, *et al*. Deep learning for predicting COVID-19 malignant progression [published online ahead of print, 2021 May 12]. Med Image Anal. 2021; 72:102096. doi: 10.1016/j.media.2021.102096.
96. Guan WJ, Ni ZY, Hu Y, Liang WH, Ou CQ, He JX, *et al*. Clinical characteristics of coronavirus disease 2019 in China. N Engl J Med 2020;382:1708-20.
97. Fan Y, Zhao K, Shi Z, Zhou P. Bat coronaviruses in China. Viruses 2019;11:210.
98. D'Amico F, Baumgart D, Danese S, Peyrin-Biroulet L. Diarrhea during COVID-19 Infection: Pathogenesis, epidemiology, prevention, and management. Clin Gastroenterol Hepatol 2020;18:1663-72.
99. Xu P, Zhou Q, Xu J. Mechanism of thrombocytopenia in COVID-19 patients. Ann Hematol 2020;99:1205-8.
100. Belen-Apak F, Sarıalioğlu F. Pulmonary intravascular coagulation in COVID-19: Possible pathogenesis and recommendations on anticoagulant/thrombolytic therapy. J Thromb Thrombolysis 2020;50:278-80.
101. Lippi G, Plebani M, Henry B. Thrombocytopenia is associated with severe coronavirus disease 2019 (COVID-19) infections: A meta-analysis. Clin Chim Acta 2020;506:145-8.
102. Yang W, Sirajuddin A, Zhang X, Liu G, Teng Z, Zhao S, *et al*. The role of imaging in 2019 novel coronavirus pneumonia (COVID-19). Eur Radiol 2020;30:4874-82.

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103. Salehi S, Abedi A, Balakrishnan S, Gholamrezanezhad A. Coronavirus Disease 2019 (COVID-19): A Systematic Review of Imaging Findings in 919 Patients. AJR Am J Roentgenol. 2020;215:87-93. doi: 10.2214/AJR.20.23034. Epub 2020 Mar 14. PMID: 32174129.
104. Ng MY, Lee EY, Yang J, Yang F, Li X, Wang W, *et al*. Imaging profile of the COVID-19 infection: Radiologic findings and literature review. Radiol Cardiothorac Imaging 2020;2:1-9.
105. Pontone G, Scafuri S, Mancini ME, Agalbato C, Guglielmo M, Baggiano A, *et al*. Role of computed tomography in COVID-19. J Cardiovasc Comput Tomogr 2020;15:27-36.
106. Jordan CN, Zajac AM, Lindsay DS. Encephalitozoon cuniculi infection in rabbits. Compend Contin Educ Vet 2006;28:108-16.
107. Künzel F, Gruber A, Tichy A, Edelhofer R, Nell B, Hassan J, *et al*. Clinical symptoms and diagnosis of encephalitozoonosis in pet rabbits. Vet Parasitol 2008;151:115-24.
108. Government of India, Ministry of Ayush. Guidelines for Homeopathic Practtitioners for COVID-19. Available from: https://www.ayush.gov.in/docs/homeopathy-guidelines.pdf. 2020. [Last accessed on 2021 Mar 22].
109. To K, Fok Y. Homeopathic Clinical Features of 18 Patients in COVID-19 Outbreaks in Hong Kong. Homeopathy 2020;109:146-62.

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कोविड–19 के लिए होम्योपैथिक दवाओं का एक समूहः नैदानिक विशेषताओं का एक सुव्यवस्थित पुनरावलोकन

पष्ठभूमिः ऐतिहासिक रूप से, होम्योपैथिक की विभिन्न दवाईयों को संक्रामक महामारी जनित बीमारियों की रोकथाम और प्रबंधन में एक महत्वपूर्ण भूमिका को आरोपित करने के लिए जाना जाता है। **उद्देश्यः** यह अध्ययन इस उभरती हुई कोरोनावायरस बीमारी की नैदानिक विशेषताओं के सुव्यवस्थित पुनरावलोकन एवं सांख्यिकीय मूल्यांकन को संचालित करने के माध्यम से कोविड–19 महामारी के उपचार और रोगनिरोध हेतु भावी होम्योपैथिक दवाओं की सूची को संकलित करने पर लक्षित है। **पद्धतियाँः** एक सुव्यवस्थित पुनरावलोकन विज्ञप्ति को प्रिज्मा विवरण के प्रतिवेदित विषयों के अनुसार विकसित किया गया था। पबमेड,विश्व स्वास्थ्य संगठन के आंकड़ा कोष, मेडआरएक्सआईवी तथा बायोआरएक्सआईवी से लेखों को पुनरावलोकन के लिए चुना गया था। अंग्रेजी और सरल चीनी भाषा में दिसंबर 2019 से 26 मार्च 2020 के बीच किए गए अध्ययनों को समाहित किया गया था। नैदानिक विशेषताओं के आंकड़ें, कोविड–19 के प्रयोगशाला एवं छाती के सीटी निष्कर्षों को छाँटा एवं विश्लेषित किया गया था। विभिन्न लक्षणों तथा उनकी तीव्रता को सांख्यिकीय तौर पर विश्लेषित किया गया था। **परिणामः** 73 अध्ययनों को समाहित किया गया था। कोविड–19 मरीजों में, बुखार (119.869±24.425, [95% CI 71.149–168.589], सूखी खाँसी (91.028±19.555, [52.007–130.050]), तथा श्वासकष्ट (24.594±5.949, [12.722 – 36.465]) सबसे सामान्य पाये जाने वाले लक्षण थे। रक्त में ल्यूकोपेनिया (16.06±5.07, [5.95–26.18]), ग्राउंड ग्लास ओपेसिटी (62.23±18.82, [24.74–99.72]), खंडमय (21.48±12.36, [3.13–46.11]), तथा फेफड़ों में जमावट (18.67±9.18, [0.373–36.968]) देखी गई थी। चुनिंदा चिन्हों एवं लक्षणों को प्रतिवेदित किया गया था, जिसके परिणामस्वरूप कोविड–19 के लिए संभावित दवाओं के तौर पर विविध होम्योपैथिक दवाओं की सूची सामने आई थी, जिनमें आर्सेनिक एल्बम (94.59 प्रतिशत) और ब्रायोनिया एल्बा (91.89 प्रतिशत) मुख्य दवाऐं थीं। **निष्कर्षः** मौजूदा नैदानिक अभिव्यक्तियों के मद्देनजर, होम्योपैथिक दवाओं की एक विश्वसनीय सूची को ढूँढ़ने के लिए किया गया यह एक ऐसा अग्रणी अध्ययन है जो इस पेश को कोविड–19 बीमारी के एक रोगनिरोध को चुनने के साथ–साथ उसका उपचार करने में मददगार साबित हो सकता है।

Un groupe de médicaments homéopathiques pour COVID-19 : une revue systématique des caractéristiques cliniques

Contexte: Historiquement, plusieurs médicaments homéopathiques sont connus pour avoir attribué un rôle important dans le contrôle et la gestion des maladies épidémiques infectieuses. **Objectifs:** Cette étude visait à compiler une liste de médicaments homéopathiques potentiels pour le traitement et la prophylaxie de l'épidémie de COVID-19 en effectuant une revue systématique et une analyse statistique des caractéristiques cliniques de cette maladie coronavirus émergente. **Méthodes:** Un protocole de revue systématique a été développé selon les éléments de rapport de la déclaration PRISMA. Les articles à examiner ont été sélectionnés dans PubMed, la base de données de l'Organisation mondiale de la santé, MedRxiV et BioRxiv. Des études en anglais et en chinois simplifié de décembre 2019 au 26 mars 2020 ont été incluses. Les données sur les caractéristiques cliniques, les résultats de laboratoire et de tomodensitométrie thoracique de COVID-19 ont été extraites et analysées. Plusieurs symptômes et leur intensité ont été analysés statistiquement. **Résultats:** Soixante-treize études ont été incluses. Parmi les patients COVID-19, la fièvre (119,869±24,425, [IC à 95% 71,149 – 168,589]), la toux sèche (91,028±19,555, [52,007 - 130,050]) et la dyspnée (24,594±5,949, [12,722 – 36,465]) étaient les symptômes les plus courants. Leucopénie (16,06±5,07, [5,95-26,18]) dans le sang, opacité de verre dépoli (62,23 ± 18,82, [24,74-99,72]), irrégulier (21,48±12,36, [3,13-46,11]) et consolidation (18,67±9,18, [0,373-36,968]) dans les poumons ont été observés. Le signe et les symptômes sélectionnés ont été répertoriés, ce qui a abouti à une liste de plusieurs médicaments homéopathiques en tant que médicaments potentiels pour COVID-19, dirigée par Arsenic Album (94,59%) et Bryonia alba (91,89%). **Conclusion.** Compte tenu des manifestations cliniques actuelles, il s'agit d'une étude pionnière pour trouver une liste plausible de médicaments homéopathiques qui pourraient aider la profession dans le traitement ainsi que pour sélectionner une prophylaxie de la maladie COVID-19.

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Un grupo de medicamentos homeopáticos para COVID-19: Una revisión sistemática de las características clínicas

Antecedentes: Históricamente, se sabe que varios medicamentos homeopáticos han atribuido un papel significativo en el control y manejo de enfermedades epidémicas infecciosas. **Objetivos:** El objetivo de este estudio fue elaborar una lista de posibles medicamentos homeopáticos para el tratamiento y la profilaxis de la epidemia de COVID-19 mediante una revisión sistemática y un análisis estadístico de las características clínicas de esta enfermedad coronavirus emergente **Métodos:** Se desarrolló un protocolo de revisión sistemática de acuerdo con los elementos de informe de la sentencia PRISMA. Los artículos para revisión fueron seleccionados de PubMed, la base de datos de la Organización Mundial de la Salud, MedRxiV y BioRxiv. Se incluyeron estudios en inglés y chino simplificado de diciembre de 2019 a marzo de 26 2020. Se extrajeron y analizaron los datos sobre las características clínicas, los resultados de laboratorio y TAC torácicos de COVID-19. Se analizaron estadísticamente varios síntomas y su intensidad. **Resultados:** Se incluyeron setenta y tres estudios. Entre los pacientes de COVID-19, la fiebre (119.869±24.425, [IC del 95%: 71.149 a 168.589]), la tos seca (91.028±19.555, [52.007 - 130.050]) y la disnea (24.594±5.949, [12.722 - 36.465]) fueron los síntomas más comunes. Leucopenia (16.06±5.07, [5.95-26.18]) en sangre, opacidad del vidrio esmerilado (62.23±18.82, [24.74-99.72]), irregular (21.48±12.36, [3.13-46.11]), y se observó consolidación (18,67±9,18, [0,373-36,968]) en los pulmones. El signo y los síntomas seleccionados fueron repertorizados, lo que resultó en una lista de múltiples medicamentos homeopáticos como medicamentos potenciales para COVID-19, liderados por Arsenic Album (94,59%) y Bryonia alba (91,89%). **Conclusión.** Considerando las manifestaciones clínicas actuales, este es un estudio pionero para encontrar una lista plausible de medicamentos homeopáticos que podrían ayudar a la profesión en el tratamiento, así como para seleccionar un profiláctico de la enfermedad COVID-19.

Eine Gruppe homöopathischer Arzneimittel gegen COVID-19: Eine systematische Überprüfung der klinischen Merkmale

Hintergrund: In der Vergangenheit haben mehrere homöopathische Arzneimittel bekanntermaßen eine bedeutende Rolle bei der Kontrolle und Behandlung infektiöser epidemischer Erkrankungen gespielt. **Ziele:** Diese Studie zielte darauf ab, eine Liste prospektiver homöopathischer Arzneimittel zur Behandlung und Prophylaxe der COVID-19-Epidemie durch eine systematische Überprüfung und statistische Analyse der klinischen Merkmale dieser aufkommenden Coronavirus-Krankheit zu erstellen. **Methoden:** Ein systematisches Überprüfungsprotokoll wurde gemäß den Berichtspositionen der PRISMA-Erklärung entwickelt. Artikel zur Überprüfung wurden aus PubMed, World Health Organization Database, medRxiv und bioRxiv ausgewählt. Studien in Englisch und vereinfachtem Chinesisch von Dezember 2019 bis März 26 2020 wurden aufgenommen. Daten zu klinischen Merkmalen, Labor-und CT-Thoraxergebnissen von COVID-19 wurden extrahiert und analysiert. Mehrere Symptome und ihre Intensität wurden statistisch analysiert. **Ergebnisse:** Siebzig-drei Dreiundsiebzig Studien wurden eingeschlossen. Unter COVID-19 Patienten, Fieber (119.869±24.425, [95% CI 71.149 - 168.589]), trockener Husten (91.028±19.555, [52.007 - 130.050]), und Atemnot (24.594±5.949, [12.722 - 36.465]) waren die häufigsten Symptome. Leukopenie (16.06±5.07, [5.95-26.18]) in Blut, Boden Glas Opazität (62.23±18.82, [24.74-99.72]), lückenhaft (21.48±12.36, [3.13-46.11]), und Konsolidierung (18.67±9.18, [0.373-36.968]) in der Lunge beobachtet wurden. Die ausgewählten Anzeichen und Symptome wurden repertorisiert, was zu einer Liste mehrerer homöopathischenr Arzneimitteln als potenzielle Arzneimittel gegen COVID-19 führte, angeführt von Arsenic Album (94.59%) und Bryonia alba (91.89%). **Schlussfolgerung:.** In Anbetracht der aktuellen klinischen Manifestationen ist dies eine Pionierstudie, um eine plausible Liste homöopathischer Arzneimittel zu finden, die dem Beruf bei der Behandlung helfen und eine Prophylaxe der COVID-19-Krankheit auswählen können.

一组Covid-19的顺势疗法药物：临床特征的系统综述

背景：历史上，已知几种顺势疗法药物在传染病的控制和管理中发挥了重要作用。 目的：本研究旨在通过对这种新兴冠状病毒疾病的临床特征进行系统审查和统计分析，编制一份用于治疗和预防COVID-19流行病的前瞻性顺势疗法药物清单。 方法：根据PRISMA声明的报告项目，制定了系统审查方案。 供审查的文章选自PubMed，世界卫生组织数据库，MedRxiV和BioRxiv。 包括2019年12月至2020年3月26日的英语和简体中文研究。 提取并分析了COVID-19的临床特征，实验室和CT胸部结果的数据。 统计分析了几种症状及其强度。 结果：包括73项研究。 在COVID-19患者中，发热（119.869±24.425，[95％CI71.149-168.589]），干咳(91.028±19.555, [52.007 - 130.050]), 和呼吸困难(24.594±5.949, [12.722 - 36.465]) 是最常见的症状 白细胞减少(16.06±5.07, [5.95-26.18]) 在血液中，地面玻璃不透明度(62.23±18.82, [24.74-99.72]), 斑片(21.48±12.36, [3.13-46.11]), 和整合(18.67±9.18, [0.373-36.968]) 在肺中进行观察。 选择的标志和症状被重新分配，这导致了多种顺势疗法药物作为COVID-19的潜在药物的列表，由砷专辑（94.59％）和白蔷薇（91.89％）领导。 结论。 考虑到目前的临床表现，这是一项先驱研究，用于寻找可能有助于专业治疗的顺势疗法药物列表以及选择COVID-19疾病的预防性药物。

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SUPPLEMENTARY

Supplementary Table 1: The characteristics of the included literature

Reference	Country	Number of patients	Age (median) years	Male	Female	Deaths
MQ *et al*., 2020	China	9	36	5	4	0
M *et al*., 2020	China	30	38.5	10	20	0
L *et al*., 2020	China	29	56	21	8	2
Xu *et al*., 2020	China	62	41	35	27	0
Yingxia Liu *et al*., 2020	China	12	53.6	4	8	0
Wang, Chen, Lu, Chen and Zhang, 2020	China	4	47.5	3	1	0
Song *et al*., 2020	China	51	49	25	26	0
N. Chen *et al*., 2020	China	99	55.5	67	32	11
C. Huang *et al*., 2020	China	41	49	30	11	6
Chan *et al*., 2020	China	7	39.5	4	3	0
Qian *et al*., 2020	China	91	50	37	54	0
Mo *et al*., 2020	China	155	54	86	69	0
K. Liu *et al*., 2020	China	137	57	61	76	16
Ye *et al*., 2020	China	5	37	2	3	0
Hu *et al*., 2020	China	24	32.5	8	16	0
Chang *et al*., 2020	China	13	34	10	3	0
D. Wang *et al*., 2020	China	138	56	75	63	6
J. jin Zhang *et al*., 2020	China	140	57	71	69	1
J. Wu *et al*., 2020	China	80	46.1	39	41	0
Yihui Huang *et al*., 2020	China	34	56.2	14	20	0
Guan *et al*., 2020	China	1099	47	643	456	5
Kong *et al*., 2020	Korea	28	42.6	15	13	0
W. Yang *et al*., 2020	China	149	45.11	81	68	0
X. Zhang *et al*., 2020	China	645	46.65	328	317	0
Zheng *et al*., 2020	China	25	3	14	11	0
Cai *et al*., 2020	China	298	47	149	149	0
G. Chen *et al*., 2020	China	21	56.3	17	4	4
Ai *et al*., 2020	China	102	50.38	52	50	3
Lei and Jian-ya *et al*., 2020	China	141	44	72	69	0
L Liu and Gao *et al*., 2020	China	51	45	32	19	1
Wu X, *et al*., 2020	China	577	55	254	323	39
Mao *et al*., 2020	China	214	52.7	87	127	1
J. Chen *et al*., 2020	China	51	52	18	33	0
G. wei-jie *et al*., 2020	China	1590	48.9	904	686	50
B. Zhang *et al*., 2020	China	82	72.5	54	28	82
W. Wang *et al*., 2020	China	11	58	10	1	0
Yanli Liu *et al*., 2020	China	109	55	59	50	31
Liang *et al*., 2020	China	21	42	11	10	0
Fan *et al*., 2020	China	148	50.5	73	75	1
C. Wu *et al*., 2020	China	188	51.9	119	69	43
L. Xu *et al*., 2020	China	434	47	228	206	0
H. Xu *et al*., 2020	China	48	39.08	13	35	0
Ying L *et al*., 2020	China	36	45	16	20	0
P. Yang *et al*., 2020	China	55	44	33	22	2
Wu *et al*., 2020	China	267	48	149	118	4
Bi *et al*., 2020	China	391	45	187	204	3
Jin *et al*., 2020	China	43	62	22	21	37
Ying Huang *et al*., 2020	China	36	69.22	25	11	36
Wu, xu, Jin and Pan, 2020	China	21	43.1	10	11	0
Chen *et al*., 2020	China	89	33	30	59	0
G. Zhang *et al*., 2020	China	221	55	108	113	12

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Supplementary Table 1: Contd...

Reference	Country	Number of patients	Age (median) years	Male	Female	Deaths
Cao *et al*., 2020	China	198	50.1	101	97	1
Xiaoping Chen *et al*., 2020	China	25	51.4	11	14	0
Xu Chen *et al*., 2020	China	291	46	145	146	2
Zhao *et al*., 2020	China	75	47	42	33	0
Qiu *et al*., 2020	China	104	43	49	55	1
Song, Xu, He and Lu, 2020	China	73	53	46	27	0
L Liu, 2020	China	153	54	93	60	0
Tang *et al*., 2020	China	25	6.9	17	8	0
R. Liu *et al*., 2020	China	41	39.1	17	24	0
Liao *et al*., 2020	China	46	0	24	22	0
Kujawski *et al*., 2020	USA	12	53	8	4	0
J. Liu *et al*., 2020	China	64	35	23	41	0
Shi *et al*., 2020	China	101	71	60	41	101
C. Zhang *et al*., 2020	China	34	2.75	14	20	0
L. Chen *et al*., 2020	China	534	0	0	0	0
Zhao *et al*., 2020	China	77	52	34	43	5
Tabata *et al*., 2020	Japan	104	68	47	57	0
Q. Wu *et al*., 2020	China	74	0	0	0	0
Luo *et al*., 2020	China	403	56	193	210	100
Yan *et al*., 2020	China	168	51	81	87	6
Fu *et al*., 2020	China	52	44.5	0	0	0
Fang *et al*., 2020	China	133	0	66	67	3

Supplementary Table 2: Bias risk assessment

Study	1	2	3	4	5	6	7	8	Score
MQ *et al*., 2020	2	2	2	2	2	1	2	1	14
M *et al*., 2020	2	2	2	2	1	1	2	1	13
L *et al*., 2020	2	2	2	1	2	1	1	1	12
Xu *et al*., 2020	2	2	2	2	2	2	2	2	16
Yingxia Liu *et al*., 2020	2	2	2	1	1	1	2	1	12
Wang, Chen, Lu, Chen and Zhang, 2020	2	2	2	1	2	2	1	2	14
Song *et al*., 2020	2	2	1	2	1	2	1	1	12
N. Chen *et al*., 2020	1	2	2	1	2	2	1	1	12
C. Huang *et al*., 2020	2	1	1	2	2	2	1	2	13
Chan *et al*., 2020	2	2	1	1	2	2	2	2	14
Qian *et al*., 2020	2	2	2	1	1	2	2	1	13
Mo *et al*., 2020	2	2	1	1	2	1	1	2	12
K. Liu *et al*., 2020	2	2	2	1	1	2	2	2	14
Ye *et al*., 2020	2	1	2	2	2	1	1	2	13
Hu *et al*., 2020	2	2	1	1	2	1	2	2	13
Chang *et al*., 2020	2	1	2	2	1	1	2	2	13
D. Wang *et al*., 2020	2	2	2	1	1	2	2	1	13
J. jin Zhang *et al*., 2020	2	1	1	2	2	1	2	2	13
J. Wu *et al*., 2020	2	2	2	1	2	2	2	1	14
Yihui Huang *et al*., 2020	2	1	2	2	2	1	1	2	13
Guan *et al*., 2020	2	2	2	2	2	1	1	2	14
Kong *et al*., 2020	2	2	1	2	2	2	2	2	15
W. Yang *et al*., 2020	1	2	2	1	1	1	2	2	12
X. Zhang *et al*., 2020	2	2	2	1	1	1	1	2	12
Zheng *et al*., 2020	2	2	1	1	2	2	2	1	13
Cai *et al*., 2020	2	1	2	2	1	2	2	2	14
G. Chen *et al*., 2020	2	1	2	2	2	2	1	1	13

Contd...

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Supplementary Table 2: Contd...

Ai *et al*., 2020	2	1	1	1	2	2	2	2	13
lei & Jian-ya *et al*., 2020	2	2	2	1	2	2	1	2	14
L Liu and Gao *et al*., 2020	2	2	1	2	1	1	2	2	13
Wu X, *et al*., 2020	2	2	2	2	1	1	2	2	14
Mao *et al*., 2020	2	1	2	2	1	2	2	2	14
J. Chen *et al*., 2020	2	2	2	1	1	2	2	1	13
G. wei-jie *et al*., 2020	2	2	1	1	2	2	1	1	12
B. Zhang *et al*., 2020	1	1	2	2	1	1	2	1	11
W. Wang *et al*., 2020	2	1	2	2	1	1	2	2	13
Yanli Liu *et al*., 2020	1	2	2	2	1	2	1	1	12
Liang *et al*., 2020	2	1	1	1	2	2	1	1	11
Fan *et al*., 2020	2	2	1	1	1	2	2	2	13
C. Wu *et al*., 2020	2	2	2	1	1	1	1	2	12
L. Xu *et al*., 2020	2	2	1	1	1	1	1	2	11
H. Xu *et al*., 2020	2	2	1	1	1	2	2	2	13
Ying L *et al*., 2020	2	2	2	2	2	1	1	2	14
P. Yang *et al*., 2020	2	2	1	2	2	1	1	2	13
Wu *et al*., 2020	2	1	1	2	2	1	1	2	12
Bi *et al*., 2020	2	1	2	1	1	1	2	2	12
Jin *et al*., 2020	2	2	2	1	2	2	2	1	14
Ying Huang *et al*., 2020	2	1	1	2	2	2	1	1	12
Wu, xu, Jin and Pan, 2020	2	2	2	1	1	2	2	2	14
Chen *et al*., 2020	2	2	1	1	1	2	2	1	12
G. Zhang *et al*., 2020	2	2	2	1	1	2	2	2	14
Cao *et al*., 2020	2	2	2	1	1	2	2	1	13
Xiaoping Chen *et al*., 2020	2	1	2	2	2	1	1	2	13
Xu Chen *et al*., 2020	2	2	2	1	1	2	2	1	13
Zhao *et al*., 2020	2	2	1	1	1	1	2	2	12
Qiu *et al*., 2020	2	1	1	2	2	2	2	1	13
Song, Xu, He and Lu, 2020	2	2	2	1	1	1	2	1	12
L Liu, 2020	1	2	1	2	2	1	1	1	11
Tang *et al*., 2020	2	2	1	1	1	1	2	2	12
R. Liu *et al*., 2020	2	2	1	2	2	1	1	1	12
Liao *et al*., 2020	2	1	2	2	2	1	1	1	12
Kujawski *et al*., 2020	2	1	1	2	2	2	2	1	13
J. Liu *et al*., 2020	2	2	1	1	1	2	2	2	13
Shi *et al*., 2020	2	2	2	1	1	1	1	2	12
C. Zhang *et al*., 2020	2	2	2	1	1	1	1	2	12
L. Chen *et al*., 2020	1	1	2	2	1	2	2	1	12
Zhao *et al*., 2020	2	1	1	2	2	2	1	1	12
Tabata *et al*., 2020	1	2	2	1	2	2	2	1	13
Q. Wu *et al*., 2020	1	1	2	2	2	1	2	1	12
Luo *et al*., 2020	2	1	1	1	2	2	2	1	12
Yan *et al*., 2020	2	2	2	1	1	2	2	1	13
Fu *et al*., 2020	1	2	2	1	1	2	2	1	12
Fang *et al*., 2020	2	1	2	1	1	2	1	2	12

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Supplementary Table 3: Murphy's repertorization

2. Clipboard 2		ars.	lach.	phos.	sulph.	bry.	puls.	lyc.	merc.	nat-m.	sep.	carb-v.	ant-t.	calc.	chin.	sil.	bell.	acon.	apis	rhus-t.	iod.	kali-c.	
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
		24 59	21 49	21 49	21 49	21 48	21 46	21 45	20 46	20 42	20 39	20 37	19 41	19 41	19 41	19 41	19 39	19 38	19 37	19 37	18 38	18 37	18 36
1. Fevers - CHILLINESS, fever with	(52) 1	3	1	1	2	-	1	-	3	1	2	1	-	1	3	1	2	1	1	-	-	2	2
2. Fevers - REMITTENT, fever	(44) 1	3	2	1	2	3	1	2	3	-	1	-	2	-	1	-	3	3	2	2	-	-	3
3. Coughing - DRY, cough	(254) 1	3	3	3	3	3	3	2	2	3	2	2	1	3	3	2	3	3	1	2	3	3	2
4. Headaches - HEADACHES, head pain, general	(260) 1	3	3	3	3	3	3	2	3	3	3	2	1	3	3	3	3	1	3	2	2	2	2
5. Throat - INFLAMMATION, throat	(123) 1	2	3	2	2	2	2	3	3	2	1	1	-	2	-	-	3	3	2	2	2	2	2
6. Rectum - DIARRHEA, general	(220) 1	3	2	3	3	3	2	3	3	3	2	3	3	3	3	3	2	2	3	1	3	2	3
7. Nose - CORYZA, general - discharge, fluent, with	(163) 1	2	1	1	2	1	1	1	2	2	1	1	1	2	1	1	2	1	1	1	2	1	1
8. Nose - OBSTRUCTED, nasal passages	(164) 1	3	2	3	2	1	3	3	2	3	2	3	-	3	2	3	-	1	1	2	2	2	2
9. Breathing - DIFFICULT, breathing	(287) 1	3	3	3	3	3	3	3	2	2	2	3	3	2	3	3	2	2	3	2	2	3	2
10. Breathing - DIFFICULT, breathing - pain, during	(12) 1	2	-	-	1	1	2	-	-	1	1	1	-	-	-	1	-	-	-	-	-	-	-
11. Stomach - NAUSEA, general	(276) 1	3	2	2	3	2	3	2	2	3	3	2	3	2	3	3	3	2	1	3	2	3	3
12. Stomach - VOMITING, general	(178) 1	3	2	3	3	3	3	2	2	2	2	-	3	2	3	3	2	3	3	1	2	1	3
13. Food - APPETITE, general - diminished	(116) 1	1	2	1	1	-	1	2	1	1	1	1	1	1	1	1	1	-	-	1	1	1	-
14. Generals - PAINS, general, agg. during the pain	(13) 1	1	-	-	-	-	-	1	-	-	1	-	-	-	-	-	-	-	-	1	-	-	1
15. Generals - WEAKNESS, sensation of being	(310) 1	3	3	3	3	1	2	2	3	1	3	2	3	3	3	3	1	1	3	3	3	3	2
16. Muscles - PAIN, muscles	(62) 1	1	-	-	-	3	1	1	1	1	-	-	2	-	-	1	1	2	-	2	-	-	-
17. Generals - WEARINESS, sensation	(142) 1	2	3	3	3	2	3	3	3	3	3	2	2	1	1	3	1	1	-	2	-	1	1
18. Blood - THROMBOSIS	(14) 1	2	2	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	2	-	-	-	-
19. Blood - ANEMIA	(173) 1	2	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	1	-	-	1	-	1
20. Blood - PHLEBITIS	(62) 1	2	3	1	2	3	2	2	1	-	2	1	2	3	2	2	2	3	1	3	2	2	2
21. Lungs - PNEUMONIA, infection	(104) 1	3	2	3	3	3	3	3	2	3	3	3	2	2	2	2	3	2	3	2	2	-	
22. Lungs - PNEUMONIA, infection - consolidation stage	(8) 1	-	-	2	1	2	-	-	-	-	-	-	1	-	-	-	-	-	-	-	2	-	-
23. Lungs - CROUP	(71) 1	2	3	3	-	1	-	1	-	2	-	2	2	2	2	-	2	3	1	-	3	-	2
24. Lungs - PULMONARY, edema	(63) 1	3	3	2	2	3	1	3	2	2	-	2	3	1	1	2	-	-	3	-	2	3	-
25. Lungs - BRONCHITIS, infection	(109) 1	3	2	3	2	3	3	3	2	2	2	2	3	2	1	3	2	2	2	2	2	2	2

Supplementary Table 4: Synthesis repertorization

1. Synthesis		lach.	ars.	puls.	sulph.	phos.	bry.	lyc.	chin.	carb-v.	sep.	acon.	merc.	nat-m.	ant-t.	bell.	rhus-t.	arn.	colch.	tub.	calc.	sil.	h
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
		20 42	19 47	19 45	19 44	19 42	18 43	18 39	18 36	18 35	18 34	18 32	17 39	17 38	17 37	17 36	17 30	17 28	17 28	17 24	16 37	16 36	16 33
1. FEVER - CHILLINESS; with	(56) 1	1	2	3	2	1	-	-	-	1	2	1	2	1	-	2	-	2	2	2	3	1	1
2. FEVER - REMITTENT	(50) 1	2	3	1	2	1	3	2	1	-	1	3	3	-	2	3	1	1	-	1	-	-	-
3. COUGH - DRY	(404) 1	3	3	3	3	3	3	2	3	2	2	3	2	3	1	3	2	2	1	3	3	2	2
4. HEAD - PAIN	(584) 1	3	3	3	3	3	3	2	3	2	3	1	3	3	1	3	2	2	1	1	3	3	2
5. THROAT - INFLAMMATION	(201) 1	3	2	2	2	2	2	3	2	1	1	3	3	2	-	3	2	-	2	-	2	2	3
6. RECTUM - DIARRHEA	(578) 1	2	3	2	3	3	3	3	3	3	2	2	3	3	3	2	2	2	2	1	3	3	3
7. NOSE - CORYZA - discharge, with	(238) 1	2	3	3	3	1	2	2	2	2	2	2	3	3	2	3	1	-	1	-	3	2	2
8. NOSE - OBSTRUCTION	(272) 1	2	3	3	2	3	1	3	2	3	2	1	2	3	-	1	2	-	1	1	3	3	2
9. RESPIRATION - DIFFICULT	(425) 1	3	3	3	3	3	3	3	3	3	2	2	2	2	3	2	2	2	2	2	2	3	3
10. RESPIRATION - DIFFICULT - pain; during - Chest; in	(1) 1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11. STOMACH - NAUSEA	(574) 1	2	3	3	3	2	2	2	3	2	3	2	2	3	3	3	3	1	3	1	2	3	3
12. STOMACH - VOMITING	(387) 1	2	3	3	3	3	3	2	3	2	2	3	2	2	3	2	1	2	3	2	2	3	2
13. STOMACH - APPETITE - diminished	(263) 1	2	1	1	1	1	-	2	1	1	1	-	1	1	1	1	1	2	1	1	1	1	-
14. GENERALS - PAIN - Body; all over	(22) 1	-	-	-	-	-	2	-	-	-	1	1	-	-	1	-	-	1	1	-	-	-	-
15. GENERALS - PAIN - Muscles	(90) 1	-	1	1	-	-	2	1	1	-	-	2	1	1	2	1	2	2	2	1	-	1	-
16. CHEST - INFLAMMATION - Bronchial tubes	(197) 1	2	3	3	2	3	3	3	1	2	2	2	2	2	3	2	2	2	1	1	2	3	3
17. GENERALS - BLOOD VESSELS - complaints of	(32) 1	2	-	3	1	2	-	1	-	3	1	1	-	1	-	2	-	1	-	-	-	-	-
18. CHEST - INFLAMMATION - Lungs - pleuropneumonia	(20) 1	2	-	-	2	3	3	-	2	-	-	-	-	-	3	-	2	-	-	1	2	-	2
19. GENERALS - WEARINESS	(313) 1	3	1	3	3	3	2	3	1	2	3	1	3	3	2	1	2	2	1	3	2	3	2
20. GENERALS - THROMBOSIS	(20) 1	1	2	-	-	-	-	-	-	1	-	-	-	-	-	-	-	1	-	-	-	-	-
21. GENERALS - EMBOLISM	(1) 1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
22. GENERALS - ANEMIA	(214) 1	2	3	3	3	3	2	1	3	2	2	1	3	3	2	2	2	2	1	1	3	1	1
23. CHEST - INFLAMMATION - Lungs - catarrhal	(15) 1	1	2	1	-	-	-	-	1	1	-	-	-	-	3	-	-	-	-	-	-	-	-
24. CHEST - DROPSY	(86) 1	2	3	1	2	1	3	3	1	2	2	1	2	2	2	-	1	1	3	1	1	2	1
25. CHEST - THICKENING - Lungs	(8) 1	-	-	-	1	1	1	1	-	-	-	-	-	-	-	-	-	-	-	1	-	-	1