

Research Article,

Naturoestheticotherapy, Based on E-Coaching with Food Cosmetic Remedy Prepared from Medicinal Plants and Essential Oils Mixtures, Alone or in Combination of Conventional Medicines to Treat Covid-19 Patients and Symptoms.

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Abstract:

Introduction: This is the first study to evaluate the family (30) members (98) practice combining specific lifestyle with the use of medicinal plants based on EOM and conventional medicines.

Clinical observation procedures: A considered multi-centric, controlled and single-blind, phase two clinical trial was realized to patients consulted and received in the Antananarivo Naturoestheticotherapy e-Coaching cabinet of Gasy Products Services and those from Covid-19 Treatment Centers, respectively, during twenty-two months: from May 1st, 2020 to March 1st, 2022. Patients were recommended to follow a specific alimentation and behavior lifestyle. Food Cosmetic Remedy, based on medicinal plant and essential oil mixtures with patient's optional conventional medicines were given to those presenting Covid-19 principal symptom, such as breath shortness accompanied other indicated symptoms or confirmed medical diagnoses/tests.

Outcomes and conclusion: Inhalation of EOM were immediately stopped breath shortness, combining medicinal plants based on essential oil and conventional medicines was psychologically help and physically reinforce the organism to improve Covid-19 symptoms. Food Cosmetic Remedy (combination of medicinal plant and essential oil mixtures) was quickly recovered patients from principal symptoms and reduced time care and long-Covid-19 period. No patient death was registered during the studied observation period.

Keywords: Naturoestheticotherapy, Food Cosmetic Remedy, Medicinal Plants and Essential Oils mixtures, Conventional medicines, Covid-19 symptoms.

Introduction:

Covid-19 is one of the deadliest epidemic disease that has become a pandemic for these first two years of the 2020-year series, with catastrophic consequences on the global economy and in particular to the public: not only for the moral but also for the physical health, the outcome of which is body/mental destructive and/or fatal for hundreds million people [1].

NaturoEstheticoTherapy e-Coaching (NETe-C)

has been a lifestyle concept education initiated by researchers from Gasy Products Services (GPS) since the end of 1990s. It consists on searching and developing remedies and cosmetics, prepared especially from plant foods by Malagasy family members, for the prevention and treatment of human beauty failings and body diseases. The principal ingredients of the Food Cosmetic Remedy (FCR) used for the present study were herbal extract/juice/powder composed of

Medicinal Plants Mixture (MPM), associated frequently by Essential Oils Mixture (EOM).

In the event of great uncertainty, caused by such sudden epidemic or pandemic disease, and since ancient times, many people have been combined medical practices (conventional and traditional) to avoid the consequences of a disease with a probably fatal outcome [2].

The present study aims to develop the management of a particular respiratory pathology, such as Covid-19. Application/use of FCR based on essential oil, alone or combined with conventional drugs, in patients with Covid-19 symptoms, was observed, evaluating their efficacy/safety in order to propose the most appropriate therapeutic regimen.

Clinical Observation Procedures:

Ethical considerations

This clinical trial protocol, part of the “Malagasy families traditional practice setting” study, was approved by the Ethics Committee of BioMedical Research at the Public Health Ministry of the Madagascar Government (Reference n° 086MSANP/SG/AGMED/CERBM on April 30th, 2020).

Study design

The present clinical observation was conducted, from May 1st, 2020 to March 1st, 2022, to patients arrived in consultation at, and/or those received at the Madagascar Capital (Antananarivo) or East Province (Toamasina) Covid-19 Treatment Centers (CTC) and some private/public hospitals whose recommended services from, GPS NETe-C Cabinet. It was considered as a multi-centric, phase two prospective and analytical evaluative clinical trial. The effects of FCR, based on EOM, alone or combined with conventional medicines, on the Covid-19 patients/symptoms were assessed. Patients presented the breath shortness, as severe and typical appeared symptom, were primordially included in the study. Such accompanied clinical manifestations were secondly considered: cough, fever (upraised body temperature), general infection, headache, nasal and/or airway irritation and/or allergic reaction and weakness.

Medications

FCR was prepared following the Mixture of:

- Essential Oils from hydro distillation of the following plant species: leaf (*Cinnamomum camphora/zeylanicum*, *Cedrelopsis grevei*, *Cinnamosma fragrans/madagascariensis*, *Eucalyptus globulus/citriodora*, *Helichrysum gymnocephalum*, *Melaleuca quinquenervia*, *Psidium guajava*, *Mentha piperita*) and clove (*Syzygium aromaticum*);
- Medicinal Plants: *Allium sativum* (crushed clove), *Aloe macroclada* (leaf gel), *Citrus limon* (fruit juice), *Vitis vinifera* (fermented grapefruit juice), *Zingiber officinale* (ground rhizome), *Honey*.

Pharmaceutical medicines were prescribed by physician, procured and cited (Amoxicillin, Azithromycin, CaC1000, Dexamethasone, MangeB6, Paracetamol, Vitamin C) by patients themselves.

Intervention

All age and gender volunteer patients received during the study period and presenting the Covid-19 principal symptoms, informed consenting the use of an herbal remedy from traditional medicine alone or combined to conventional medicines, were included in the clinical trial assessment. All patients were received EOM for inhalation (diffuser, handkerchief, inhaler, mask). According to their own conviction/demand/acceptance, some patients were added the mixture of medicinal remedy and/or pharmaceutical medicines. FCR, based on MPM, was especially counselled to patients during the long/post-Covid-19 period. EOM was given for preventive and curative care. Conventional medicines were only taken for curative purpose. MPM alone or combined with EOM were used for preventive and curative care(s), and post-Covid-19 period. Patients were received medications at the beginning of their study inclusion and reported care issue later on. During the Covid-19 disease/epidemic/pandemic period, especially during the winter season, in addition to barrier gesture, combined or not to traditional remedies and conventional medicine, patients were counselled to follow an adequate lifestyle based on alimentation and particular behavior: eat hot meals with multicolor fruits and vegetables, take hot bath, drink especially hot water and/or acid fruit juice (rich in Vitamin C or ascorbic acid), cover warmly all-time the body

and the neck/throat.

Data collection and analysis

Data were recorded using the Microsoft Excel Program (Office Version 2016), and were analyzed with R software (Version 4.0.3, R Core Team, 2020). Khi2 (proportion expressed in percentage) tests were used for data analyzing; the values of $p < 0.05$ were statistically considered significant.

Outcomes and Discussion:

At the middle-time of year 2018, Gasy Products Services launched a new service named Naturoestheticotherapy e-Coaching. Cosmetic & Remedy research and development were primordialy practiced. It is, also a lifestyle concept tutoring, consisting on advising, counselling, directing, guiding, instructing, opining, recommending and warning patients to apply natural method/substance and to use plant cosmetic/remedy to maintain human beauty, and/or preventing, caring and post-treating human (or animal) disease. By word to mouth, the Cabinet received more and more patients for this purpose. Patients from another hospital and/or center care have phoned and also welcomed. FCR based on EOM is one of these research fruit activities. . Proportions of some major essential oil ingredients used in this study was indicated (Table 1).

Table 1. Major ingredient proportions of EOM determined by gas phase chromatography with Elite-Wax column, 50 to 245°C oven temperature, flame ionization detector, hydrogen gas vector and split mode injection.

Ingredient	Proportion (%)
Cineole	43.5
Eugenol	16.0
Cinnamaldehyde	8.8
Sabinene	6.1
Pinene	5.0
Humulene	3.2
Myrcene	2.9
Limonene	2.7
Caryophyllene	2.7
Terpineol	2.2
Viridiflorol	1.4
Linalol	1.3

Almost hundred patients, members from thirty families were selected for this present clinical trial. Before and after care assessment were evaluated, outcomes were summarized (Table 2). At the beginning of this Covid-19 epidemic disease, at the end of 2019, becoming pandemic later, no conventional nor traditional medicine was used for first-line drugs nor remedy [3]. For several reasons, Malagasy people are afraid/avoided to go/join the hospital or to a specialized center, except for serious cases incurable by them. And most of the patients included in this study were treated at home. In Madagascar, as observed elsewhere [4], to care diseases with cough as a principal symptom, people use the mixture of aromatic plants based on *Eucalyptus* and similar perfumed species. The principal component of these volatile substances is 1,8-cineole [5], named also eucalyptol, that was the present studied EOM major ingredient (Table 1). Inhaled, this component inhibited inflammation and mucus secretion by cells/tissues in the respiratory tract [6], thus probably avoiding patients Covid-19 severe form, breath shortness [7]. The immediate disappearance of breath shortness was encouraged patients to continue the treatment, giving them more psychological strengthens. Do not linger, in other words, immediately initiate treatment from the start of the first symptom was observed to avoid passing through severe and fatale forms. As Covid-19 is basically a microbial (virus) respiratory tract disease, applying inhaled drugs seems a better approach for effective treatment, hence the choice of products based on volatile essential oil; ingredients were arrived directly in contact to virus preventing its multiplication and inhibited resulting allergic reaction or inflammation [8]. All patients, inhaled EOM, were reported its immediate efficiency against breath shortness. Respecting the remedy purpose indications was provided better efficiency: one patient was made herself the EOM, but based on these indicated plants, the outcome report was identic; an another patient was reported that she had less or almost not asthma crises when EOM was diffused at home all nights. As reported, the all-night diffusion or spontaneous nasal application of inhaled essential oil was relieved a lot of respiratory functional and microbial diseases:

allergic reaction, chronic obstructive bronchopneumonia, common cold, cough, flu. To sustain patients to overcome their fear during the Covid-19 management, their choice to combine remedies with conventional medicines was respected. The physician choice of conventional drugs was respected and applied by patients themselves. Outcome reports, compared to those were used only traditional remedies, were statistically significant ($p = 0.00000048$): psychological support would have played a key role in the patient recovery [9]. Nevertheless, slightly longer healing time was observed, especially cough symptom, the only major reported drawback of this combination. The weak inhibitory competitive effect between the remedy ingredients and conventional medicine active principals should be the principal cause. Competition might obviously more observable to organic functions: respiratory tract inflammation or mucus secretion and allergic reaction. Paracetamol, in addition to the minor antalgic and antipyretic effects, as a peripheral vasodilator, supplied peripheral tissues (such as brain, kidney, liver, lung, muscle) in nutriment and white globules, and would help organism to fight viral body propagation. MPM was prepared and based on Malagasy family tradition receipts. Their components were scientifically proved to improve Covid-19 principal symptoms: microbial (virus) development inhibition, physical force strengthening [10, 11]. EOM added to MPM, FCR efficiency during the long-Covid-19 period must be due to its anti-histaminic effect, preventing respiratory tract allergic reaction. A wide age range of patients, regardless of gender, from three to ninety years old, were received FCR. As secondary effects: passing light dizziness, weak headache and nausea were reported for little overdose or non-diluted MPM, and local tract respiratory contact allergic reaction and sneeze for EOM inhalation. Some essential oil ingredients

should cause these allergenic effects. Knowing that the fight against viral infection was based on immune defense strengthening, lifestyle care of food (eating plenty hot meals with multicolor fruits and vegetables accompanied of lot vitamins and proteins) and behavior (covering warmly) was advised. As a result, the body may have concentrated all its energies to confront virus invasion. EOM breath shortness efficiency was especially reported and FCR was more claimed and recommended during the long-Covid-19 period. NETe-C with FCR would protect organism and apparently stimulate immunity defense, by stopping the respiratory tract severe inflammation and global body viral multiplication. The optional adding use of conventional medicines was significantly reinforcing the traditional practice efficiencies.

Conclusion:

Naturoestheticotherapy e-Coaching was contributed to ameliorate the medical care of Covid-19 patients and symptoms. Almost hundred family members were treated with FCR: EOM inhalation was relieved breath shortness, a Covid-19 severe and fatal form symptom, within few minutes; following a specific recommended lifestyle and combining MPM composed of EOM with optionally added conventional medicine (Amoxicillin, Paracetamol, Vitamin C) were significantly helped patients to improve Covid-19 principal symptoms such as cough, general infection, fever, headache, weakness, and shortened patients period care; taking only FCR was quickly get well patients from post-Covid-19 bad health and was abridged the long Covid-19 period. No patient death was registered during the studied observation period.

RAFATRO Herintsoa.et al./ Naturoestheticohepary, Based on E-Coaching with Food Cosmetic Remedy Prepared from Medicinal Plants and Essential Oils Mixtures, Alone or in Combination of Conventional Medicines to Treat Covid-19 Patients and Symptoms

Table 2. Patient summarized demographic characteristics and clinical trial outcomes.

Family n° (FN)	Member effective	Clinical information	Demographic characteristic		Medical care						Issue											
			Gender	Age range	Used motif	Locality	Advise	Traditional remedy		Conventional medicine												
								Studied preparations	Other													
1	3	Covid RDT: positive	M&F	3 - 30	T&P	HS	A l l i m e n t a t i o n a l O i l B e h a v i o r L i f e s t y l e	E s s e n t i a l O i l M e d i c i n e (E O M) (P M) (a M n) t														
2	2	Contact cases	F	60	P	HS																
3	7	All symptoms	M&F	5 - 60	P&T	HS																
4	6																					
5	5								Contact cases													
6	8																					
7	4									M&F	20 - 60	P&T	HS									
8	3	Contact cases	M&F	10 - 50	P&T	HS																
9	2		M&F	30	P&T	HS																
10	2	All symptoms, Contact cases, Covid Rapid Diagnostic & PCR Tests: positives	M&F	90	P&T	HS									Antibiotic, Antipyretic, Fortifying							
11	2	Covid RDT: positive, Scamer = pulmonary lesion at 50% with Covid-19 suspicion	M&F	60	T&P	CTC									Antibiotic, Paracetamol							
12	1	All symptoms	F	20	T&P	HS									Amoxicillin, CaC1000, MangeB6, Paracetamol, Vitamin C							
13	3	Nasal irritation	M&F	10 - 40	P	HS																
14	2	Contact cases	M&F	70	P&T	HS																
15	4	All symptoms, Covid Rapid Diagnostic and PCR Tests: positives	M&F	20 - 60	P&T	HS-HP																
16	1	All symptoms, Oxygen saturation less than 95%	F	70	T&P	HS																
17	4	Suspicious and contact cases	M&F	20 - 50	P	HS																
18	1	Contact case	F	50	P	HS									Plant Remedy added							
19	1	Contact case	F	70	P	HS									Inhaled and plant remedies added							
20	3	All symptoms, Covid Rapid Diagnostic and PCR Tests: positives	M&F	20 - 60	T&P	HS-CTC									EOM gel added							
21	10	All symptoms	M&F	3 - 70	P&T	HS-CTC																
22	1	PCR test: positive	F	50	P&T	HS																
23	5	All symptoms	M&F	3 - 50	P&T	HS										Antibiotic, Antipyretic, Fortifying.						
24	1	Severe form	M	50	T&P	CTC																
25	8	Severe form, Contact cases	M&F	10 - 80	P&T	H-CTC																
26	2	Severe form, Contact cases	M&F	40	T&P	HS																
27	2	Scamer = pulmonary lesion at 25 to 35% with Covid-19 suspicion, Long Covid	F	50	T&P	HS										Paracetamol, Dexamethasone, Azithromycin.						
28	3	All symptoms	M&F	10 - 30	T&P	HS										Paracetamol, Dexamethasone, Azithromycin, Vitamin C, MangeB6						
29	1	Long Covid	F	70	PC	HS																
30	1	PCR test: positive	F	50	P&T	HS																
Total:		98											EOM and MPM own prepared	Antibiotic, Antipyretic, Fortifying								

FN: Family Number, RDT: Rapid Diagnostic Test, PCR: Polymerase Chain Reaction, EOM: Essential Oil Mixture, MPM: Medicinal Plant Mixture.
P&T: Prevention and Treatment, T&P: Treatment and prevention, P: prevention, PC: Post Covid, HS: Homeself, HP: Hospital, CTC: Covid Treatment Center, M: Male, F: Female, M&F: Male and Female

Conflict of interest statement

The Food Cosmetic Remedy (Medicinal Plant and Essential Oil Mixtures), used during this clinical trial, were prepared based on Malagasy traditional family receipt, developed - shared - given by GPS to those who recommended or accepted it. The authors report no declarations of interest.

Acknowledgements

Special thanks for GPS scientific and medical care staff for their own support to achieve this study.

References:

[1] <https://www.coronavirus-statistiques.com/stats-globale/covid-19-par-pays-nombre-de-cas/>

- [2] Yan S, Lu Y, Zhang G, Li X, Wang Z, Yao C, Wu G, Luo L, Ai Y, Guo Z, Li H, Li T, Jia Z, Wang J, He L, Liu B. Effect of heat-clearing and detoxifying Chinese medicines combined with conventional therapy on mild hand, foot, and mouth disease with fever: An individual patient data meta-analysis. *Medicine*. 2020; 99:23.
- [3] Mujeeb Khan, Syed F Adil, Hamad Z Alkathlan, Muhammad N Tahir, Sadia Saif, Merajuddin Khan, Shams T Khan. COVID-19: A Global Challenge with Old History, *Epidemiology and Progress So Far*. *Molecules*. 2020 Dec 23;26(1):39. doi: 10.3390/molecules26010039.
- [4] Ladda Her, Juntip Kanjanasilp, Nathorn Chaiyakunapruk, Rattree Sawangjit. Efficacy and Safety of *Eucalyptus* for Relieving Cough: A Systematic Review and Meta-Analysis of Randomized Controlled Trials. *J Integr Complement Med*. 2022 Mar;28(3):218-226. doi: 10.1089/jicm.2021.0226.
- [5] Mostafa H Baky, Mohamed A Farag, Dalia M Rasheed. Metabolome-Based Analysis of Herbal Cough Preparations Via Headspace Solid-Phase Microextraction GC/MS and Multivariate Data Analyses: A Prospect for Its Essential Oil Equivalency. *ACS Omega*. 2020 Nov 27;5(48):31370-31380. doi: 10.1021/acsomega.0c04923.
- [6] Amir Hasani, Demetri Pavia, Nathan Toms, Paul Dilworth, John E Agnew. Effect of aromatics on lung mucociliary clearance in patients with chronic airways obstruction. *J Altern Complement Med*. 2003 Apr;9(2):243-9. doi: 10.1089/10755530360623356.
- [7] Juergen Fischer 1, Uwe Dethlefsen. Efficacy of cineole in patients suffering from acute bronchitis: a placebo-controlled double-blind trial. *Cough*. 2013 Nov 21;9(1):25. doi: 10.1186/1745-9974-9-25.
- [8] Angela E Sadlon, Davis W Lamson. Immune-modifying and antimicrobial effects of Eucalyptus oil and simple inhalation devices. *Altern Med Rev*. 2010 Apr;15(1):33-47.
- [9] Paula Rodríguez-Fernández, Josefa González-Santos, Mirian Santamaría-Peláez, Raúl Soto-Cámara, Esteban Sánchez-González, Jerónimo J González-Bernal. Psychological Effects of Home Confinement and Social Distancing Derived from COVID-19 in the General Population-A Systematic Review. *Int J Environ Res Public Health*. 2021 Jun 17;18(12):6528. doi: 10.3390/ijerph18126528.
- [10] Bikash Adhikari 1, Bishnu P Marasini 2, Binod Rayamajhee 3 4, Bibek Raj Bhattarai 1, Ganesh Lamichhane 1, Karan Khadayat 1 2, Achyut Adhikari 1, Santosh Khanal 2, Niranjana Parajuli. Potential roles of medicinal plants for the treatment of viral diseases focusing on COVID-19: A review. *Phytother Res*. 2021 Mar;35(3):1298-1312. doi: 10.1002/ptr.6893. Epub 2020 Oct 9.
- [11] Omar F Khabour, Salwa F M Hassanein. Use of vitamin/zinc supplements, medicinal plants, and immune boosting drinks during COVID-19 pandemic: A pilot study from Benha city, Egypt. *Heliyon*. 2021 Mar;7(3):e06538. doi: 10.1016/j.heliyon.2021.e06538. Epub 2021 Mar 15.