

High-Diluted-Potential-Internal-Biomedicines Zingiber officinale Extract Prevent 21st-Century Pandemic: Enriched Drugs Health Socio-Economy!

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1. Abstract

1.1 Backgrounds: The great loss of lives and transmission or reinfection of new variant and mutant-coronavirus or long COVID-19 badly causes global healthcare-crises, strained health-resources, global education, drug-research, and socio-economy also, and increases long term psychological-or-neurological-effects or post-acute viral-syndromes in future. So it is needed to recover urgently educational-and-research institutions including all the systems, by reopening, reorienting, and developing the policy-initiative preventive measures against the “21st -Century Pandemic”.

1.2. Materials and Methods: The high-diluted biomedicine, Zingiber officinale extract, prepared from the rhizome of ginger, Zingiber officinale Rosc., is mixed with a cup of moderately hot sterile-distilled-or pure-drinking-water or tea or milk, orally-administered, or taking orally @ 4-6 times/day (after taking any kinds of nutritious food) against naturally occurring coronavirus infections 30-days before symptom onset OR illness onset (as a vaccine) OR onset of symptoms where patients in hospital-associated COVID-19 infections has been reported (treatments) and the dose may be increased depending on the intensity of diseases in case of treatment.

1.3. Results: The present preventive treatment measures have revealed that high-diluted-internal-biomedicine, Zingiber officinale extract, highly effective in controlling diseases by boosting natural immunity against coronavirus with no side-effects.

1.4 Conclusion: The cost-effective, eco-friendly, easily-available, easily-applicable, side-effects-free, and easily-reparable, high-diluted potential internal-biomedicine, Zingiber officinale extract, may prevent 21st-century pandemic, by improving drug-and clinical-research, global-health, socio-economy, and science-technological-advancements issues. And in the future, it may be very effective by using ultra-high-diluted internal-biomedicines; Zingiber officinale extracts, or vaccines against many other virulent-coronavirus pandemics, oncology, and oral-health and multidisciplinary-care of COVID-19-survivors also.

2. Introduction

The great loss of lives and transmission, or reinfection of new variant and mutant-coronavirus-2 (SARS-CoV-2) pandemic, or long COVID-19 badly causes global healthcare-crises, strained health-resources, future healthcare issues, multi-organ-disease with post-acute viral-syndromes of other virulent coronavirus epidemics, global education, drug-research and socio-economy also, and increases long term psychological-or-neurological-effects or post-acute viral-syndromes in future [1-4]. So it is needed to recover urgently educational-and clinical-research institutions including all the systems, by reopening, reorienting, managing, and developing the policy-initiative preventive measures against the “21st-Century Pandemic or High-Risk Post-Acute-COVID-19” which fulfill the Indian theme “Vision 2040” by the “Common Goals and Innovative Partnership” for clinical characteristics,

treatment, and prognosis of coronavirus-2 patients, removing immunotoxicity, neurotoxicity, and drug toxicity [4-5].

It has been primarily observed that the effects of ginger, therapeutic regimen on clinical manifestations and paraclinical features in moderately ill or acute COVID-19 patients [7] and prevention and treatment of gastrointestinal cancer for the chemoprevention and chemotherapeutic potential [8], due to the presence of potential, effective and active phytochemical-constituents in ginger like 8-Gingerol, 10-Gingerol etc., are significantly active against COVID-19 [9]. It has also presented many ulcerogenic agents, antioxidant, anti-cholinergic, and anti-histaminic receptors [10-11]. It also effective on tumor suppression of genes [12], anti-platelet and cyclooxygenase-I inhibitory properties [13], relieving menstrual cramps antimicrobial effect [14], cholesterol regulation, and hypotensive properties [15] etc. It increases the demand for ginger in this Covid-19 season due to massive consumption for boosting immunity which has led to an increase in demand and global economic impact on ginger export [16-17]. But it has some problems regarding application costs, and not always environment friendly

causing problems of biodiversity conservation.

So the main aims and objectives are to prepare high-diluted OR ultra-high-diluted cost-effective, easily prepare-able, easily available, easily manufacture-able, equitable, marketable, and supply-able biomedicine, Zingiber officinale extract, against deadly pandemic new variant and mutant-coronavirus-2 (SARS-CoV-2) patient.

3. Materials and Methods

3.1. Preparation of Biomedicine- Zingiber officinale Extract

Air-dried and powdered rhizomes of ginger, Zingiber officinale Rosc. (Plate 1), were extracted with 90% ethanol at room temperature ($25\pm 2^\circ\text{C}$) for 15 days and were filtered for collecting extract. Later, the ethanol from the extract was removed by evaporation at room temperature ($25\pm 2^\circ\text{C}$). The residue was dried in a desiccator over anhydrous calcium chloride [18]. The crude residue was diluted in 90% ethanol at 1mg/ml concentration and was prepared, Zingiber officinale extract of Zingiber officinale MT (Original solution or crude extract i.e. Mother Tincture) [18].



Plate 1: Rhizomes of ginger, Zingiber officinale Rosc.

3.2. Preparation of Ultra High Diluted Biomedicines Liquids; Zingiber officinale 30C, Zingiber officinale 200C, and Zingiber officinale 1000C

These biomedicines were prepared by a few drops of a liquid potency of; Zingiber officinale 30C, and Zingiber officinale 200C, and Zingiber officinale 1000C [18-19].

3.3. Preparation of Ultra High Diluted Biomedicines Globules; Zingiber officinale 30C, Zingiber officinale 200C, and Zingiber officinale 1000C

These biomedicine globules were prepared by soaking of the few

drops of a liquid potency in the proportion of 7.2 mg globules/ml of; Zingiber officinale 30C, and Zingiber officinale 200C and Zingiber officinale 1000C [18-19].

3.4. Place of Treatments

The treatments and visits were done at random in the different containment areas of the Burdwan Municipality from 17-03-2020 to 31-03-2021 under the guidance of the Burdwan Medical College and Hospital and Chief Medical Officer of the Hospital (BMCH AND CMOH) who provided rapid antigen kits for the infected and comorbid patients (Table 1).

Table 1: Effects of high-diluted Zingiber officinale extract on COVID-19 patients and observation of the reinfection of coronavirus-2

Average Treatment Age Groups (years)	Treatment and Visited Area: Burdwan Municipality (17-03-2020 to 31-03-2021)						Remarks
	Average Number of Family Visited	Average Number of Family Member	Average Percent COVID-19 Active Patient	Average Percent COVID-19 Passive	Average Percent Home Quarantine	Average Recovery Percent	
I. Senior: (60-99)	97a±00.01	489b±00.21	46a±00.04	44.62b±00.16	74.62b±00.12	74.87b±00.16	Died only aged and comorbid patients
II. Middle: (20-59)	153b±00.01	467c±00.71	34b±00.02	52.02a±00.08	86.02a±00.14	100a±00.16	No reinfection occur
III. Early: (00-19)	271c±00.01	882a±00.81	00c±00.01	20.00c±00.02	20.00c±00.01	100a±00.16	No reinfection occur
Total: (01-99)	521	1847	80	117	180	274.87	Very good result

a,b,c: Significant difference by 't'-test ($P\leq 0.01$) in the same column.

3.5. Treatments

The treatments were done by; 5-10 drops of the high-diluted biomedicine, *Zingiber officinale* extract, is mixed with a cup of moderately hot sterile-distilled-or pure-drinking-water or tea or milk, orally-administered, or taking orally @ 4-6 times/day (after taking any kinds of nutritious food) against naturally occurring coronavirus infections 30-days before symptom onset OR illness onset (as a vaccine) OR onset of symptoms where patients in hospital-associated COVID-19 infections has been reported (treatments), and the dose may be increased depending on the intensity of diseases in case of treatment [2,6,18-19].

4. Results and Discussion

(Table 1) showed the effects of high-diluted biomedicine, *Zingiber officinale* extract on COVID-19 patients, and observation of the reinfection of coronavirus-2 in the Bardhaman town, and all the data were counted for the statistical analysis by 't'-test ($P \leq 0.01$). It was observed that the aged senior and comorbid COVID-19 patients were infected badly with high mortality rate than the other two age groups (Table 1) due to treatment with high-diluted biomedicine, *Zingiber officinale* extract, which enriched innate immunity [2,6-21]. It was interesting that the under 20 age group showed as passive coronavirus carrier with absolutely recovery. It was remarkable that no reinfection occurs in the middle and early age group of all family member due to the effects of biomedicine, *Zingiber officinale* extract, long-lasting potential immunity due to the presence of potential, effective and active phytochemical-constituents in ginger like 8-Gingerol, 10-Gingerol etc., are significantly active against COVID-19 [2,6-21]. So, the present preventive treatment measures revealed that high-diluted-internal-potential-biomedicine, *Zingiber officinale* extract, highly effective in controlling diseases by boosting natural immunity against coronavirus with no side-effects.

5. Future Research

In this new normal situation, it will be essential to inform public health expertise, clinical and academic research, to reopen, and, the present results and discussion fulfill the goal for the research suggestions because the present pretreatments with the ultra-high diluted biomedicines; *Zingiber officinale* -MT or – *Zingiber officinale* 30C, *Zingiber officinale* 200C and *Zingiber officinale* 1000C-liquid OR - *Zingiber officinale* 30C, *Zingiber officinale* 200C and *Zingiber officinale* 1000C- globules, at an extremely ultra-low doses, for future research [2,6-21].

The following reasons may be useful for future use as follows:

1. Use as traditional medicines.
2. Overcome various medical complications.
3. Proven for many pharmacological activities.
4. Due to low toxicity ($LD_{50} = 3741.7 \text{ mg/kg}$) and high efficacy.

5. Present of various effective phytochemical constitutions.
6. No side effects and some vaccines made from their phytoconstituents crossing the Avogadro limit.
7. Cost-effectiveness, easily prepare-able, easily available, easily manufacture-able, equitable, marketable and supply-able etc. and develop the highest quality scientific information on all aspects of pharmacology and its studies or proper side-effects frees effective medicines or drugs, which also includes up-to-date information in translational research as well as to promote communication and collaboration among researchers and professional clinicians from all over the world, developing policy-initiative social strategies issues also.

6. Conclusion

The cost-effective, eco-friendly, easily-available, easily-applicable, side-effects-free and easily-reparable, high-diluted potential internal-biomedicine, *Zingiber officinale* extract, may prevent 21st-century pandemic, by improving drug-and clinical-research, global-health, socio-economy and science-technological-advancements issues. And in the future, it may be very effective by using ultra-high-diluted internal-biomedicines; *Zingiber officinale* extracts, or vaccines against many other virulent-coronavirus pandemics, oncology, and oral-health and multidisciplinary-care of COVID-19-survivors also.

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