Research Article

High-Diluted-Biomedicines Turmeric Extract (TE) act as Preventive Policy-Developer-Potential-21st-Century-Pandemic COVID 19 Vaccines: Achieved Community-Communication-Medicine-Science-Applications-Public-Health-Ecology-Green-Technology-Innovations–Economy-Social-Welfare-Issues!

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Abstract

Introduction: Recently the COVID-19 Coronavirus-Disease-2019 caused by reinfection of the numerous new-mutant-coronavirus long COVID-19-variant SARS-CoV-2, not only effects on global health, education, clinical research, economy, prolonged-neurological-damage, and total change of human civilization, but also its effects on some organs and tissues in Children causing the ‘Multisystem-Inflammatory-Syndrome (MIS-C)’ also, and the sixteen-months-pandemic have punctuated humanity's timeline for hundreds of years, sowing panic, millions of infections (188) and killing 4-millions. Though the middle-and upper-classes now enjoying the vaccination, the minority, and low-income households, are really suffering. Still, the pandemic prevails, and the main objectives of the research are to find out suitable cost-effective community-biomedicines or universal vaccines by using high-diluted-form of turmeric extract with the help of local students Non-Governmental-Organization (NGO), and doctors.

Methods: In the 11-slam-area, the community-biomedicine of high-diluted-form, Turmeric Extract (TE) or turmeric MT, made from the turmeric-rhizome, Curcuma longa L., is mixed @10-20 drops (1-2mg) /cup (100ml-150ml) of moderately-hot germ-free-drinking-water, administered orally every-day in the early morning (with an empty-stomach) once/day for thirty-days before illness-onset as a preventive measure, with no need to ethical consideration for the permissible doses and safety concerns, OR may be applied after the symptom-onset against present coronavirus infections as a vaccine, where COVID-19 patients in hospitalized, and also the dose could also be increased looking on the intensity of diseases, and age, just in case of treatment suggested by the doctors, and the young-local-students NGO, the “Burdwan-Green-Haunter-and-Students’-Goal”, take initiative for COVID-protocol, social-awareness- and treatment-camp with doctors.

Results: The current preventive-treatment measures have shown that community-biomedicines of high-diluted-TE are more potent in preventing-pathogens by increasing-immunity against COVID-19 with the carcinogenic-free and ‘Multisystem-Inflammatory-Syndrome (MIS-C)’-free results in the 11-slam treated-area than another-control-area of Purba Bardhaman, and the NGOs are an active-helper in all respect.

Conclusions: The easily-available, easily-suppliable, easily-applicable, side-effects-free, non-toxic, cost-effective, eco-friendly, easily-preparable, and the “MIS-C” free high-diluted-potential-community-biomedicine, Turmeric Extract, maybe act as preventive-policy-developer-potential-21st-century-pandemic COVID 19 vaccine by achieving community-medicine-clinical-research-public-health-ecology-green-socio-economy-welfare-science-technologies-sociology-communication-applications-issues-advancements. In new normal, it’d be the foremost important vaccines by applying the community-biomedicines of ultra-high-diluted-TE against day-to-day new virulent-coronavirus pandemics, and another multidisciplinary-health-disease suffering from COVID-19 improving community-immunity-or-herd-immunity also, and NGO act as potential-Social-Vaccines’ again, using biotechnology, biological researchers, biomedical-study-processes, and the final goal of future developing-potential-treatments and cures.

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Introduction

Currently, the COVID-19 coronavirus disease 2019 is caused by re-infection of the numerous new meltant-coronavirus long COVID-19 variant SARS-CoV-2, not only effects on global health, education, clinical research, economy, prolonged-neurological-damage, and total change of human civilization, but also its effects on some organs and tissues in Children causing the ‘Multi-system-Inflammatory-Syndrome (MIS-C)’ also, and the sixteen-months-pandemic have punctuated humanity’s timeline for hundreds of years, sowing panic, millions of infections (188), and killing 4-millions. Though the middle-and upper-classes are enjoying the vaccination, the minority and low-income households are really suffering [1-5]. Still, the pandemic prevails, the people are asking regarding changed-research, and the scientists are navigating for the directions by developing policy initiative potential cost-effective-universal-vaccines [1-7].

During the visit to the health checkup camp of Kanchannagar D.N.Das High School (HS), Dr. Ranjan Mukherjee, MD from Dr. B.R.A. University, District Coordinator of Sishu Sathi Scheme at Department of Health and Family Welfare, Government, Bardhaman-713101, India, informed me that turmeric is also effective against COVID-19, and it’s already well-known that designing the most effective formulation and clinical and molecular mechanisms of curcumin in turmeric shows the new effective treatment option with high efficacy and good bioavailability to treat COVID-19 with high mortality risk, and its several therapeutic effects including antiviral, anti-nociceptive, anti-inflammatory, antipruritic, anti-fatigue, anti-oxidant, anti-apoptotic, anti-fibrotic effects, and inhibitory effects on NF-κB, inflammatory cytokines and chemokines, toll-like receptors, bradykinin, antidotal or protective effects, and its active ingredient, curcumin, are against natural and chemical toxicities [8,9]. It’s reported that the potential therapeutic effect of turmeric contents against SARS-CoV-2 compared with experimental COVID-19 therapies, forming ‘Wonder Drug as a safety measure for COVID-19 Management’ because of presence of various immune-boosting phytochemicals i.e. promising potential treatment methods or role of curcumin against this viral diseases or next promising nanosystems antiviral alternatives or the molecular mechanistic insights with relevance host-pathogen interaction and immunomodulation, and therefore the curcumin interact with S protein of SARS CoV2 and ACE2 of human plasma membrane insights from computational studies, and therefore the curcumin-piperine supplementation on clinical signs, duration, severity, and inflammatory factors in patients with COVID-19 in a very structured summary of a study protocol for a randomised controlled trial, and it has proved the near 4000-year history of in-depth medical use in South Asia from the ‘Golden Spice, Turmeric, Traditional Medicine to Modern Medicine’ [10-20]. But it’s created many problems regarding application cost-effectiveness, and environmental friendliness, and biodiversity conservation. Currently after the post-COVID situation, within the Burdwan Medical College and Hospital, Purba Bardhaman District, India, reported that 30 children are admitted with the symptoms of ‘Multi-system Inflammatory Syndrome (MIS-C)’, and badly affected with heart diseases, and one has lost life up to 16 July 2021, BDC News Desk (Figure 1).

Therefore the purpose of the current study is to organize high-diluted OR ultra-high-diluted cost-effective, easily prepare-able, easily available, easily manufacture-able, equitable, marketable, and supply-able, community-biomedicine, Turmeric Extract (TE), prepared from the rhizome of turmeric, herbaceous plant, against deadly pandemic new variant and mutant-coronavirus-2 (SARS-CoV-2) patient, with the assistance of the young-energetic-local Non-Governmental-Organization (NGO) named “Burdwan Green Haunter and Students Goal”, take initiative or emphasis on the employment of TE among the communities, and different activities of covid-protocol to beat this epidemic situation, and it’s planned to publish as suggestions, to require preventive measures, and help policymakers and clinical scientists for community medicine vaccine discovery.

So, the specific, measurable, and consistent main identified research objectives with designs are to find out suitable cost-effective community-biomedicines or universal vaccines by using high-diluted-form of turmeric extract with the help of local students Non-Governmental-Organization (NGO), and doctors.”

Materials and methods

Research design

It is the continuation of work (Figure 1) entitled “NGO Act as Potential-Policy-Developer Social-Vaccine-COVID-19 Epidemic-Model: Achieved Green-Socio-Economic Welfare Science Technology Innovations” [21], where the specific, measurable, and consistent main identified research objectives with designs are to find out suitable cost-effective community-biomedicines or universal vaccines by using high-diluted-form of turmeric extract with the help of local students Non-Governmental-Organization (NGO), and doctors under the guidance of Dr. Subhas Chandra Datta, Headmaster & Secretary & Researcher of Kanchannagar D.N.Das High School (HS)” [21-58].

- Medicine Selection
- Sample Groups
- Location of Experiment and Duration
- Different Activity-Groups Formation and Function
- Sample Area
- Biomedicine Turmeric Extract Preparation
- Preparation of Ultra-High-Diluted-Biomedicines-Liquids; Turmeric 30C, Turmeric 200C, and Turmeric 1000C for Future
- Preparation of Ultra-High-Diluted-Biomedicines-Globules; Turmeric 30C, Turmeric 200C, and Turmeric 1000C for Future
### Analysis of COVID +Ve Cases

| Date | Days | Death | Recovered (% of Total) | Mortality (%) | Specimen Type | Positive Cases | PCR | Location |
|------|------|-------|------------------------|--------------|---------------|----------------|------|----------|
| 11/09/2020 | 1141 | 1.16 | 97.66 | 1.16 |

### Distribution of COVID Positive Cases on 11/09/2020

- Burdwan Municipality: 11
- Dainhat Municipality: 01
- Katwa Municipality: 02
- Kalna Municipality: 09
- Memari Municipality: 01
- Asramgram I: 01
- Asramgram II: 03
- Bhatar: 02
- Burdwan I: 03
- Burdwan II: 07
- Galti I: 03
- Jamalpur I: 01
- Kalna I: 01
- Kalna II: 03
- Katwa I: 01
- Khandighosh: 01
- Memari I: 03
- Memari II: 01
- Mantuwar: 02
- Mongkoloke: 01
- Purba Halishahi: 01
- Purba Harshali: 02
- Purba Harshali II: 05
- Raima I: 02

### Part-III:

#### Analysis of COVID +Ve Cases on 11/09/2020

| Type | **COVID Positive as on today** | **Total Positive Cases** |
|------|-------------------------------|-------------------------|
| Symptomatic | 11 | 443 |
| Asymptomatic | 57 | 2096 |
| Total | 68 | 3339 |

### Contact Analysis

| Type | **Total Positive Cases** |
|------|-------------------------|
| Primary Contact | 15 |
| Travel from High Burden Dist. of W.B. | 2 |
| Travel from Other State | 0 |
| No Travel History | 51 |
| Total | 68 |

### Part-I:

#### Analysis of COVID +Ve Cases on 17/03/2021

| Type | **COVID Positive as on today** | **Total Positive Cases** |
|------|-------------------------------|-------------------------|
| Symptomatic | 20 | 2754 |
| Asymptomatic | 20 | 3961 |
| Total | 40 | 6715 |

### Contact Analysis

| Type | **Total Positive Cases** |
|------|-------------------------|
| Primary Contact | 20 |
| Travel from High Burden Dist. of W.B. | 27 |
| Travel from Other State | 0 |
| No Travel History | 0 |
| Total | 40 |
Sample groups

Total preventive treatment sample groups have considered 1907–families participating in 12315–members, and the criteria are the resident of 11–slam areas with below poverty. The rest of the total populations of the Burdwan Municipality and its surrounding of Purba Bardhaman District, West Bengal, India, act as the control group (without treatment with a high–diluted form of turmeric extract (Figure 1 & Plate 1) [44,46,47,51,54].

Location of experiment and duration

The study was dole out by the doctors, headmaster, and young–local–Non–Governmental–Organization (NGO) named “Burdwan–Green–Haunter and Students’–Goal”, at the 11–slam area of Purba Bardhaman District, India. Total families were 1907 and also the total population was 12315, and therefore the activities were conducted and measured from the 11th September 2020 to 17th July 2021and up–to–date (Figure 1

Plate 1: Turmeric rhizome, treatment, visiting, campaign different activities in the slum area of Purba Bardhaman.

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Sample area

The treatment study areas were carried out by the NGO, at the 11-slam area of Burdwan Municipality and its surrounding, Purba Bardhaman, West Bengal, India, as follows:

- **In Burdwan municipality:** Five slam area;
  1. Kora Basti—67 family with more than 300 population,
  2. Bhatchala Kora Para—41 family with more than 250 population,
  3. Ichlabad Adibasi Para—315 family with more than 2100 population,
  4. Nilpur Adibasi Para—35 family with more than 135 population, and
  5. Banmasjid Para—67 family with more than 220 population.

- **In Burdwan- I:** Four slam area;
  1. Malirbagan—350 family with more than 1500 population,
  2. Dangapara—350 family with more than 4500 population,
  3. Jhinguti Adavis Para—45 family with more than 210 population, and
  4. Agriculture Farm Borpukur—250 family with more than 1400 population.

- **Burdwan-II:** Two slam area;
  1. Bhatar Chandipur—137 family with more than 600 population, and
  2. Atagarh—250 family with more than 1100 population (Figure 1 & Plate 1) [44,46,47,51,54].

Different activity-groups formation and function

The Burdwan Green Haunter and Students’ Goal, NGO, forms four main activity-groups; core group, working group, advisory group, and social media group, headed and coordinated by the secretary, Mr. Subhendu Bose, Administrator of B.Ed. College.

- Core Group: has 22-members with 10-subgroup, decision-making, and leading-working group.
- Working Group: has 210-members with 11-subgroup, engaged in different social activities.
- Advisory Group: has 10-members in different disciplines like academicians, administrators, doctors, teachers, scientists, business personalities, engineers, accountant, social reformer, reporter, government employee, and entrepreneur with different-subgroup, give advice and problem solve, if necessary.

- Social–media Group: has more than 1300 members, followers 21,000, engaged mainly for publicity.

**Key note:** COVID-19 preventive measures rules and regulation maintained in each activity (Plate 1) [21-56].

Biomedicine turmeric extract preparation

The sun-dried and powdered sort of rhizomes—turmeric, Curcuma longa L., (Plate 1), were extracted with 90% ethanol at 25±2°C temperature for 15 days and were filtered for collecting extract. Later, the ethanol from the extract was removed by evaporation at temperature (25 ± 2°C). The residue was dried in an exceedingly desiccator over anhydrous salt (CaCl₂), and therefore the crude residue was diluted in 90% ethanol at 1mg/ml concentration and was prepared, Turmeric Extract (TE) or Turmeric MT (TMT) (Original solution or crude extract i.e. Mother Tincture) [22-24,28,29,33,35,37,40,41,44-56].

**Preparation of Ultra–High–Diluted–Biomedicines–Liquids; Turmeric 30C, Turmeric 200C, and Turmeric 1000C for future:** These biomedicines were prepared by some drops of a liquid potency of Turmeric 30C, Turmeric 200C, and Turmeric 1000C [22–24,28,29,33,35,37,40,41,44–56].

**Preparation of Ultra–High–Diluted–Biomedicines–Globules; Turmeric 30C, Turmeric 200C, and Turmeric 1000C for future:** These biomedicine globules were prepared by soaking of the few drops of a liquid potency within the proportion of 7.2 mg globules/ml of Turmeric 30C, Turmeric 200C, and Turmeric 1000C [22–24,28,29,33,35,37,40,41,44–56].

Treatments

The treatments and visits were done within the different slam areas of Purba Bardhaman District (Plate 1) under the guidance of the Dr. Subhas Chandra Datta, and the visiting as well as treating doctors of Burdwan Medical College and Hospital and CMO of the Hospital (BMCH and CMOH) who only provided rapid antigen kits for the infected and comorbid patients (Table 1). In the 11-slam-area (treatment groups), the community—biomedicine of high–diluted–form, turmeric extract (TE) or turmeric MT, made from the turmeric-rhizome, Curcuma longa L., is mixed @10–20 drops (1-2mg) / cup (100ml-150ml) of moderately–hot germ–free–drinking–water, administered orally every-day in the early morning (with an empty-stomach) once/day for thirty–days before illness–onset as a preventive measure, with no need to ethical consideration for the permissible doses and safety concerns, OR may be applied after the symptom–onset against present coronavirus infections as a vaccine, where COVID–19 patients in hospitalized, and also the dose could also be increased looking on the intensity of diseases, and age, just in case of treatment consideration for the permissible doses and safety concerns, OR may be applied after the symptom–onset against present coronavirus infections as a vaccine, where COVID–19 patients in hospitalized, and also the dose could also be increased looking on the intensity of diseases, and age, just in case of treatment suggested by the doctors, and the young–local–students NGO, the “Burdwan–Green–Haunter–and–Students’–Goal”, take initiative for COVID–protocol, social–awareness– and treatment–camp with doctors [22–24,28,29,33,35,37,40,41,44–56].
Table 1: Complete findings of high-diluted TE or TMT on COVID-19 patients and observation of the 2nd phase reinfection of coronavirus-2.

| Average Treatment Age Groups (years) | Treatment and Visited Area: 11 Slum Areas of Purba Bardhaman (11-09-2020 to 17-07-2021), and Control Group: Rest of the Area of Purba Bardhaman | Remarks |
|--------------------------------------|-------------------------------------------------------------------------------------------------|---------|
|                                      | Name & Number of the Slum Area | Average Number of Family | Average Number of Family Member Visited | Average Percent of COVID-19 Active Patient | Average Percent COVID-19 Passive | Average Percent of Home Quarantine | Average Recovery Percent | Remarks |
| I. Senior Age Group: (60-99) | Burdwan Municipality & 5a | 1897±00.01 | 489±00.21 | 46±00.04 | 54±00.02 | 44±00.02 | 94±00.02 | Died only aged and comorbid patients |
| II. Middle Age Group: (20-59) | Burdwan-I & 4a | 5719±00.01 | 467±00.71 | 34±00.02 | 66±00.02 | 89±00.03 | 99±00.02 | Reinfection occur due to attend in gathering for vote camping |
| III. Early Age Group: (00-19) | Burdwan-II & 2b | 4699±00.01 | 942±00.81 | 30±00.01 | 70±00.02 | 27±00.01 | 98±00.02 | Sever reinfection occur |
| Total Age Groups (01-99) | 11 | 12315 | 1907 | 110 | 190 | 160 | 291 | Average Recovery- 98% Average Mortality-2% |
| Control Group (01-99) | 11-09-2020 | All area | All family | All family members | 333 (9.97%) | 2706 (81.04%) | 645 (86.58%) | 82.06% | Average Recovery- 92.06% Average Mortality-1.34% |
|                                      | 17-07-2021 | All area | All family | All family members | 339 (75.50%) | 38035 (99.50%) | 00 | 97.06% | Average Recovery-97.66% Average Mortality-1.16%, and 30 children died in MIS-C |

a,b,c: Significant difference by ‘t’-test (P≤0.01) in the same column.

Collection methods of data and maintenance record

Data collections methods were done directly by the NGO with the observation from 11 areas of slums communities for treatments groups, and also the regular follow of the up-to-date web portal of Purba Bardhaman maintaining records for control groups also, and every one the pieces of information were counted for statistical analysis by ‘t’-test (P<0.01) [22-24,28,29,33,35,37,40,41,44-56].

Observations

Different behavior and attitude of the communities has been observed by NGO-direct physical access, and every one the information were counted for statistical analysis by ‘t’-test (P<0.01) [21-56].

Science and technology communication

The activity of students, teachers, staffs, community, photographers, visitors, and media personnel, campaign, make the news, and publication regarding the importance in Science and Technology Communication in different audiovisual media (TV channels), social media, and journals are recorded [21-56].

Full protocol

The NGO takes initiatives or emphasis on different protocols (Plate 1), maintaining COVID-19 preventive measures rules and regulations with treatment in the slum areas, as follows [22-24,28,29,33,35,37,40,41,44-56]:

- Maintain at least 1 meter (3 feet) physical or social distance between ant two men.
- Way and use and distribution of masks.
- Avoid crowded places or gatherings.
- Regular and thoroughly clean your hands with an alcohol-based sanitizer hand rub or wash with soap and water, and supply.
- Avoid touching eyes, nose, and mouth.
- Follow good respiratory hygiene.
- Way of after coughing or sneezing, dispose of the used tissue immediately and wash hands.
- Way of proper use of specific dustbin.
- Stay home and self-isolate even with minor symptoms such as cough, headache, mild fever, until recovery.
- If fever, cough, and difficulty breathing, seek medical attention, but call by telephone in advance if possible and follow the directions of the local health authority.
- Keep up to date on the latest information from WHO or local and national health portal or authorities.
- Way of consuming nutritious foods and vegetables.
- Adopt strict- lockdown–measures, and COVID-19 rules and regulations.
- Supporting maternal and child health, mental health, or initiatives against domestic violence.
- Arrangement of blood donation camp.
• Tree-plantation with conservation-biodiversity.
• Different day-celebration.
• Procedure of reduce-economic-activities to a minimum.
• Arrangement of distributing-ration to families in slums, and to providing cooked-meals to migrants.
• Arrangement to ensure that senior-citizens have medicines.
• Distributing clothes and educational materials.
• Mobile and digital door to door- teaching.
• Arrangement of health checkup camp.
• Arrangement of comprehensive and effective science and health consciousness and communication effort.
• Arrangement of authentic scientific and health information.
• The initiative is targeted at encouraging public participation in risk-related reciprocal communication processes
• Involvement to build capacities and enable communities to develop a sense of awareness, an analytical mind, and a decision.
• Promote personal sanitation and hygiene, physical distancing, and maintaining desired collective behaviors, etc.
• Enhance science coverage in mass media including illustrative interpretations especially to reduce the fear of risks and build confidence with a dose of necessary understanding.
• Inculcate scientific temper for adopting sustainable healthy lifestyles, and nurturing scientific culture among masses and societies.
• Wall- and road- writings, and posturing.
• Arrangement of workshops for preparation of sanitizer and making of mask.
• Online celebration of different day.
• Arrangement of web talk on different issues.
• Arrangement of street-cornering regarding different issues emphasis on humanity in pandemic situation.
• Arrangement of different digital materials for social media.
• Note- All the above-mentioned jobs were done in the 11- slum sample-area of the sample treatments zone.

Results and discussion

Table 1 and Figure 1; focused on the results of biomedicine of high-diluted-Turmeric Extract (TE), or Turmeric MT (TMT) on patients suffering in COVID-19, and records the reinfection of coronavirus-2 within the study areaof Purba Bardhaman from the 11th September 2020 to 17th July 2021, and every one the information were taken for the statistical analysis by ‘t’-test (P<0.01), and it absolutely was seen that the senior-aged and comorbid-patients of COVID-19 were infected badly with high death (or mortality) rate than the opposite two age groups in treated 11-slum sample area (Table 1) because of treatment with high-diluted-biomedicine, TE, or TMT, which boosted natural immunity [1,2,6,24,28,29,33,35,37,40,41,44,45-56]. The thirty children are infected to post-COVID-19 Multisystem Inflammatory Syndrome (MIS-C) in the control area. But it absolutely was interesting that under the 20 people showed as passive coronavirus carrier with absolute recovery in the 11-slum sample area, and it had been remarkable that no reinfection occurs within the middle and early cohort of all relations thanks to the consequences of biomedicine, TE or TMT, long-lasting potential immunity because of the presence of potential, effective and active phytochemical-constituents in curcumin of turmeric, etc., are significantly active against COVID-19 [1,2,6-24,28,29,33,35,37,40,41,44,45-56]. So, this preventive treatment measures revealed that high-diluted-internal-potential-biomedicine, TE, or TMT, are highly effective in controlling diseases by boosting resistance against coronavirus with no side effects. During the 2nd phase of the pandemic of the 11-slum area of Purba Bardhaman, the “Burdwan Green Haunter, and Students’ Goal”-NGO, actively involved for awareness regarding the medication with covid-protocol, and that they also reported that the 2nd phase-COVID-19 reinfection within the slum from the 11th September 2020 to 17th July 2021, no active or severe COVID-19 middle-aged patient is shown within the 11-core-NGO-activity slum, except within the Aatagarh of Burdwan-II, where two MIS-C children of post-COVID-19 positive infection, and admitted within the hospital, and recovered, but out of 30, one died in another area [1,2,6-24,28,29,33,35,37,40,41,44,45-56]. On the opposite hand, within the non-experimental control area (In Figure 1), the COVID-19 report on 11th September 2020 and 17th July 2021, of Purba Bardhaman district, respectively shows that total COVID-19 positive cases are 3339 and 38225, the overall number of discharge cases are 2740 and 37331, and the overall number of COVID-19 death are 45 and 445, rate of recovery is 82.06 attempt to 97.66%, and rate of mortality is 1.34 % and 1.16 respectively, and it’s thought that no active or severe COVID-19 patient is shown within the poor 11 slum city area of the Purba Bardhaman, “Burdwan Green Haunter, and Students’ Goal”- NGO, actively involved for awareness regarding the medication with covid-protocol, and that they also reported that the 2nd phase-COVID-19 reinfection within the 11-slum sample area because of treatment with high-diluted-biomedicine, TE, or TMT, which boosted natural immunity [1,2,6,24,28,29,33,35,37,40,41,44,45-56]. The thirty children are infected to post-COVID-19 Multisystem Inflammatory Syndrome (MIS-C) in the control area. But it absolutely was interesting that under the 20 people showed as passive coronavirus carrier with absolute recovery in the 11-slum sample area, and it had been remarkable that no reinfection occurs within the middle and early cohort of all relations thanks to the consequences of biomedicine, TE or TMT, long-lasting potential immunity because of the presence of potential, effective and active phytochemical-constituents in curcumin of turmeric, etc., are significantly active against COVID-19 [1,2,6-24,28,29,33,35,37,40,41,44,45-56]. The thirty children are infected to post-COVID-19 Multisystem Inflammatory Syndrome (MIS-C) in the control area. 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For the comparison of achievement or more success, Figure 1 is very important, and it is considered from 11/09/2020 to 17/07/2021 by using natural biomedicine of high-diluted-Turmeric Extract (TE), or Turmeric MT (TMT), and improved in all respect of average covid-19 active-and passive-patient recovery 65.53% to 18.46% respectively, and total average recovery increased 15% in general before the 3rd phase of virus attack. Though in the treated 11 slum areas is the achievement most in the poor needy sample area. So, high-diluted-biomedicines Turmeric Extract acts as preventive COVID 19 vaccines achieving community-medicine-public-health-ecology science-technology-innovations.

Future approach in research

During this new normal situation, and it’ll be essential to tell public health-ecology expertise, test, and research, to reopen, and also the present results and discussion fulfill the goal for the long run research suggestions because the current preventive pretreatments with the ultra-high diluted biomedicines; Turmeric MT or Turmeric 30C, Turmeric 200C, and Turmeric 1000C-liquid OR -Turmeric 30C, Turmeric 200C, and Turmeric 1000C- globules, at extremely ultra-low doses, for potential future research for the subsequent reasons; use as very old traditional medicines, overcome many medical complications, effective for several pharmacological activities, very low toxicity (LD50 = 3741.7 mg/kg) and high efficacy, present of diverse potential phytochemical constitutions, side effects-free, and a few vaccines made up of their ultra-high-diluted phytoconstituents crossing the Avogadro limit, cost-effective, easily prepare-able, easily available, easily manufacture-able, equitable, marketable and supply-able, etc. and develop the best quality biomedical and life-scientific information on all aspects of pharmacology and its analytical nanoparticles studies or proper side-effects free effective medicines or drugs also. and therefore the students and “NGO Potential Policy Developer Social–Vaccine–COVID–19–Epidemic–Models Against Corona Crisis Achieved Sustainable Development Socio–Economic Welfare Science Technology Innovations, the STIP 2020 by the inclusive design process aims to strategize priorities, sectoral focus, and methods of research and technology development innovation for larger green-socio-economic-welfare, supported the theme “Vision 2040” that might help policymakers, solving the virus-induced slump, transform scientific fieldwork crisis, and also the crisis of over 1/4 of individuals with COVID-19 not fully recovered after 6–8 months within the world also, though India’s third wave of COVID-19 could also be in pockets [22–24,28–35,37,40,41,44,46]. So children should get COVID-vaccines [62].

Future-treatments-and-cures-of-biomedicine-turmeric

Just before submission of this paper, it’s worth mentioning that it’s been received the “Greetings from Advances in Agronomy, Plant Breeding and Horticulture through the Hon’ble Associate Editor, Dr. Jessica Watson by email, editor.aapbh@emedscholar.com on Thursday, 22 July 2021”, and writes, “We are happy to tell you that your manuscript has received positive review comments from the reviewer. The Review Com-

ments as follows; Biomedicine could be a Western medicine that applies biological and physiological principles to clinical practice. Biomedicine is that the cornerstone of recent health care and laboratory diagnostics. This general field of research includes many areas of both the life and physical sciences. Utilizing biotechnology techniques, biomedical researchers study biological processes and diseases with the final word goal of developing effective treatments and cures within the present manuscript, Dr. Subhas Chandra Datta reconnoiters the “Genetic effects of the biomedicines-Gall MT (GMT) on advanced agronomy-plant-breeding-horticulture-environment socio-economy green-science-technology-communication-issues by preventing okra root-knot and COVID-19”, and this is often a noteworthy study on biomedicines achieving the ‘Nature’s-Gift to Human–Disease-Free–Healthy-Life. Effect of the GMT-pretreated and GMT-post treated on okra plants inoculated with root-knot nematodes and genetic effects of root proteins of the GMT-pretreated and GMT-post treated on okra with nematode proteins were described very well. The paper is usually well written and structured. Overall, the results are clear and that it approve of its publication [10-20,63].

Ethical approval turmeric extract

The questions may arise regarding “There is no mention of the approval from an ethics committee and taking signed informed consents from participants prior to study initiation”. So it is necessary to provide this information. In India over 3,000 years ago, turmeric, primarily use as a culinary spice and traditional Indian ayurvedic medicine, and its most important active ingredient is curcuminoids with effective doses is 500–2,000 mg of turmeric per day, often in the form of an extract with a curcumin concentration that is much higher than the amounts naturally occurring in foods, and the average Indian regular diet provides around 2,000–2,500 mg of turmeric (60–100 mg of curcumin) per day, and the same amount in extract form may pack up to 1,900–2,375 mg of curcumin [64]. And turmeric and conventionally formulated curcumin products are probably safe when taken orally or applied to the skin in the recommended amounts, and it’s safe to use turmeric in amounts greater than those commonly found in food while breastfeeding also [64,65]. Here, the High-Diluted-Turmeric Extract (TE) or turmeric MT, prepared from the turmeric-rhizome, Curcuma longa L., is used as community-biomedicine@1-2mg into–20 drops are mixed in cup (100ml-150ml) of drinking-water per candidate, administered orally every-day in the early morning @once/day for thirty-days, in the 11-slam-area of Purba Bardhaman District. And the used doses are below the recommended doses. So, automatically it is no need for ethical approval or consideration for the permissible doses and safety concerns or any ethics committee and taking signed informed consents from participants prior to study initiation [64,65].

Conclusions

It is concluded that the easily-available, easily-suppliable, easily-applicable, side-effects-free, non-toxic, cost-effective, eco-friendly, and easily-preparable, high-diluted-potential-community-biomedicine, Turmeric Extract (TE) or Turmeric
MT (TMT), may act as preventive policy–developer–potential–21st-century–pandemic COVID 19 vaccine by achieving community–medicine–clinical–research–public-health–ecology–green–socio–economy–welfare–science–innovations–technology communication–applications–advancements–issues. And within the new normal–future, it would be the foremost effective vaccine by using the ultra–high–diluted type of the community–biomedicines TE against day–to–day new virulent–coronavirus pandemics, oncology, and oral–health and multidisciplinary–care of COVID–19–survivors improving community–immunity or herd–immunity also, and students–NGO acts as ‘Social–Vaccines’ by their different human resource creating effective ecology–health activities that specialize in the notice of methods, research, science, and technology development for larger green–socio–economic–welfare, supported the theme “Vision 2040” that might help policymakers, solving virus–induced economic–condition globally.

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