



Dinna Nath Das-Middle English School and – Dispensary Act As a Model: The 21st-Century-Coronavirus-2 Resistance-Futuristic-Common-Ecofriendly-Complex-Green-Digital-School-Health-Ecosystem by Bio-Medicine-Vaccine-Nationalism-Equity-Passport

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Abstract

Recently coronavirus known as SARS-CoV-2 long COVID-19 or a new variant of Coronavirus 2, the virus has resulted in more than 144 million infections and more than 3 million deaths, badly affects global education, health, and research. So it is obligatory to steady-recovery the whole system. The Doctor / Contractor / Freedom-Fighter / Social-Reformer / Philanthropist Reverent Dinna Nath Das (Karmaker) was established the “Dinna Nath Das Middle School and Dispensary for Free Education and Health for All” by donating Rs. 50,000/- (Fifty thousand rupees) with ‘Company Papers’, and land in a deed during the British periods. According to his modern-foresighted-views, and overcome these pandemic-situation, it is emphasized on the ecofriendly-modern-green-digital-infrastructure-and-facilities attached with air-purifier, the priority- and moral-activity-based-education with online-and-offline-regular-digital-teaching-learning-process, maintaining COVID-19 protocol sitting arrangements, and the active interactive-involvement, and positive attitudes with maintaining equalities among students and communities regarding the digital-class in outside-and-inside, regular fumigation of all the rooms, campus including school-dress, mandatory taking the free-vaccine-nationalism-equity-passport for all students, parents, legal guardians and family member, regular consume easily digested-nutritious-biomedical-meals with fruits-and-ginger-drinks, transforming the ‘Common-Activity-Based-Ecofriendly-Complex-Ecosystem-Model’, and school prevails with the enriched joyful-teaching-learning-process, and environment, biodiversity conservation, agriculture, science-technology-communication, socio-economy-welfare, where the owl act as keynote species, and where the bat confirm the clues to preventing-and-treating-COVID-19 by boosting the natural immunity, and helps to develop the future-policy or model; the ‘Sustainable 21st-Century-Coronavirus-2 Resistance-Futuristic-School is the Mirror of the Society in the New Normal Situation Again’.

Keywords: School and Dispensary model; 21st Century coronavirus-2-resistance-futuristic-green-digital-school-health; Bio-Medicine vaccine-nationalism-equity-passport

Introduction

According to the imperial Gazette of 1810 and the Bardhaman Raj website, there were two Middle English Schools with dispensaries in Burdwan. The Doctor / Contractor / Freedom-Fighter / Life-

Received date: 23 April 2021; Accepted date: 30 April 2021; Published date: 03 May 2021

Citation: Datta SC (2021). Dinna Nath Das-Middle English School and –Dispensary Act As a Model: The 21st-Century-Coronavirus-2 Resistance-Futuristic-Common-Ecofriendly-Complex-Green-Digital-School-Health-Ecosystem by Bio-Medicine-Vaccine-Nationalism-Equity-Passport. SunText Rev Arts Social Sci 2(1): 117.

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Long-Councilor /Social-Reformer / Philanthropist / Reverent Dinna Nath Das (Karmaker) was established this “Dinna Nath Das Middle School and Dispensary beside the Damodar river for Free Education and Health for All” by donating Rs. 50,000/- (Fifty thousand rupees) with ‘Company Papers’, and land in a legal deed on June 25, 1906, during the British periods which is still on the go as the name of Kanchannagar D.N.Das High School (HS), Co-education, affiliated to West Bengal Board of Secondary and Council of Higher Secondary Education, producing 38 state-level scholars up to 1956. But it loses its glamour due to the dark phase as natural thrashes again and again. But we are proud to rescue the same from 2001 onwards, and from 2007 under the guidance of Dr. Subhas Chandra Datta, Headmaster and Secretary, with the constant efforts, the old school building has been totally changed in a new shape both externally and internally with the help of the backward-community. The captured land including play-ground has been resolved, and the school is blooming with gradually increasing student strength; service to the students; over all-round development; various rejuvenating programmers; providing up to date education and mental boost up, forming the school as the “Human-Resource-Development-Centre reflecting Mirror of the Society”. Recently Dr. Ranjan Mukherjee, District Coordinator of Sishu Sathi Scheme at Department of Health and Family Welfare, Government of West Bengal, Bardhaman-713101, West Bengal, India, and Dr. Dipanitwa Malik, M.B.B.S., Burdwan Medical College & Hospital, has come for a health checkup of students especially emphasis on COVID-19, but students face mainly dental, eye, skin and gynecological problems. Ex-Professor Dr. Sk Abdul Mahmud, M.D.S. (Cal), a specialist in oral and dental diseases, says during treatment of Mr. Bodhisatwa Datta, Physics Honors student and Dr. S.C. Datta, headteacher, that it is a very difficult situation in dental surgery as well as treatment for infection of coronaviruses, and gum disease linked to severe COVID-19 outcomes also [1,2]. The Dinna Nath Das Dispensary had a good reputation for not only treatment of different epidemic diseases like malaria, plague, dengue, and different infectious diseases, and place for refugees declaration in 1965, etc., but also effective in dental surgery (Plate 1). Currently, it enters again into a drastic dark phase as natural pandemic thrashes the previous COVID-19 or recent SARS-CoV-2 or long COVID-19 or a new variant of Coronavirus-2, the virus has resulted in more than 144 million infections and more than 3 million deaths, badly affects global education, health, and research, and it makes the crisis of dropout, socio-economic-health, discrimination, low wages, child labor and labor protections, healthcare and ‘social determinants of health’, education. trafficking, and violence with neurological or psychological effects on students, teachers, parents, guardians, communities, academic mother, and scientist, and different neighboring families, and risk of early marriage or early pregnancy, poverty, and increases of child labor also. Some non-

governmental school teachers are in tension regarding their non-received salaries or losing a job also. And in Figure 1 shows the daily press briefing of Purba Bardhaman (Date: 26/04/2021, up to 5.00 P.M.) as well as Burdwan Municipality. So it is obligatory to steady-recovery of the ‘Education and Health’ as well as whole system snatching its glamour [1,2].

According to Dinna Nath Das, we strongly believe in inspiration as it is everywhere and we do also believe in successes as well as in failures and our goal are to transfer every failure into success and possibilities, providing our students with enough space to make mistakes and then we help them to learn from it. And we are glad to air that we are executing every instruction as laid by the Government successfully and we promise to do that in future also. So it is an urgency to recover sustainable the education system and ‘lost learning’ among students after the pandemic, by preparing students for activity-based moral real digital (online and offline mode) education without fear of examinations, and the green-and digital infrastructure and -facilities in the education system or place, procedure, and active involvement and interaction in the teaching-learning, and need to manage the inequalities in the home or communities, as well as inside the classroom. Now in this paper, it is emphasized the steady sustainable reopen the schools and to reorient by developing ideas or policy or initiatives for the preventive-measures against “21st century-various-human-diseases like COVID-19-Pandemic”, due to great loss of lives and transmission or reinfection of coronavirus-2 or long COVID-19 [3-11].

Materials and Methods

Location of dinna nath Das School and dispensary

The Kanchannagar D.N. Das High School (HS) and Dispensary, is located at 24 no. Ward of Burdwan Municipality beside the Damodar river, Bardhaman, Government of West Bengal, where the temperature was $28 \pm 5^{\circ}\text{C}$, the Relative Humidity (RH) was $75 \pm 5\%$ and soil pH 5.8, and Burdwan is extending from $22^{\circ}56'$ to $23^{\circ}53'$ North latitude and from $86^{\circ}48'$ to $88^{\circ}25'$ East longitudes, with sandy soil, well-drained and slightly acidic in nature and therefore the average rainfall was 150 millimeters.

Green digital infrastructures with teaching-learning activity and process

The Kanchannagar D.N. Das High School (HS) and Dispensary (Plate 2) will be set up a steady potential recovery-planning maintaining health and hygiene protocols of post-pandemic strong-free-Wi-Fi hotspots facilities, ICT (information and communications technology)-based regular potential carton or gameplay or balanced or quiz or puzzle -based effective enjoyable and loveable moral practical green digital teaching and learning shifted-attendance-based online-and offline-classes; by the 2-3

hours digital-or green open-or shifted-class mixing on-line (40-50%) and 3-2 hours activity based off-line face-to-face instruction (60-50%) totaling 5 hours maximum class with proper fumigation of school, all smart digital class room with smart boards, wearing fumigated-school-dress, physical distancing sitting arrangements, maintaining discipline and strictly shifted attendance protocol, preventing overcrowding, and attaching strong air purifier for fresh air room ventilation, potential effective revised green digital shifted-protocol-routine (at least 50% present in school for digital as well as activity based offline green class, and other 50% will be followed class from home), green-ICT-infrastructure, connectivity, broad-band access, free supply-able and available of devices such as laptops or desktops or tablets, mobile phones, ed-tech support and ed-tech training for all teachers, students and even communities also, scope of school midday meal with nutritious weeds-vegetables-fruits-food as biomedicine midday meal with ginger-drinks to all by increasing budget of education and proper use of educational fund, stipends, health check for screening testing to rapidly identify and isolate asymptomatic infected individuals, and mentoring of students, active involvement of local communities, administration and collaboration with NGO (non-government organizations) , and vaccinating all the students, teachers, parents, legal guardians and communities for ‘Vaccine-Nationalism-Equity-Passport, RO (reverse osmosis)-system for pure drinking water for all (including communities), regular school-dress washing and fumigation, germfree dress changing-room for all, big prayer hall cum auditorium, big community hall cum waiting room with digital or e-library, bio-toiles with big washing room, green cycle stand, big general library, museum, green-gymnasium, different craft gallery, innovation hub,

discovery laboratory with different basic laboratories, robotic laboratories, different science and cultural clubs, healthcare and retail rooms, eco-park, rainwater-harvesting with fishery and floating-gardening or aquaponics shaded by solar-panel OR covered by wire net with hanging artificial-nests, OR rooftop- or vertical- gardening or hydroponic attached with bird’s- or sky-watching balcony, different types of artificial-nests in the building as well as in the trees with health and hygiene painting, medicinal- and nutritional-garden with organic manure plants, forming the ‘Common-Ecofriendly-Complex-Ecosystem’ with landscaping by trees, garden, biomedical-midday-meals like amaranth, okra, cowpea, cucumber with ginger drinks for all etc., as ‘Social Vaccines or Vaccine or Policy Developer Vaccine, store-grains reservoir’s, indoor, security [12].

room with watch tower, route-chart for easily locating with fire safety and easy entry main gate, school building and all rooms itself maintaining health and hygiene, and different awareness of health and hygiene poster / flex / chart / banner etc., which emphasis on the development of human being — intellectual, physical, emotional, aesthetic, and moral — in an integrated manner in the community also. Teachers always apply up-to-date appropriate innovative and creative methods using MTL (Materials for Teaching Learning) like cartoon or computer-game play etc., to promote the learning process by attracting the student academically and socio-emotional enthusiasm. And maintain all COVID-19 protocol, rules, and regulation safety measures, preventing transmission of the virus among the students, teachers, and local communities [13-18].

Results and Discussion

Table 1: Effects of biomedicine meals with ginger drinks on infection of coronavirus.

Average Treatment Age Groups (years)	Treatment /Visited Kanchannagar: Burdwan Municipality (17-03-2020 to 26-04-2021)						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 Family Member: (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 Aged Guardians: (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 Aged Students: (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
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a,b,c: Significant difference by 't'-test ($P \leq 0.01$) in the same column (Reference 18).

Daily Press Briefing
Purba Bardhaman
 Date: 26/04/2021 (Up to 5.00 P.M.)
 (Report to be send by 7.00 P.M Daily)

Part - I: Related to COVID-19

i)	Total No. of COVID Positive Patients found on the day of reporting *	: 425
ii)	Total no of COVID positive patients**	: 16584
iii)	Total no of active patients as on today***	: 3666
iv)	Total no of discharged cases	: 12727
v)	Total no of COVID death recorded	: 191
* Quarantine status :		
vi)	Total no of persons under institutional quarantine	:
vii)	Total no of persons under house quarantine	: 0
viii)	Total no of persons under quarantine from Maharashtra, Delhi, Gujarat, Tamil Nadu & M.P.	:
ix)	Total no of persons under quarantine from other state of India	:
x)	Total no of persons relaxed from institutional quarantine	:
* Testing status :		
xi)	Total no of Sample collected up to 25.04.2021	: 225229
xii)	Total no of Sample tested	: 222461
xiii)	Total no of Positive cases	: 5734 (+52 repeat +ve)
xiv)	Total no of negative Cases	: 212578 (+1097 spillage/rejected)
* Containment Zone status :		
xv)	Total no of Containment Zone as on today	:
xvi)	Total no of containment withdrawn	:
* Analysis of Positive Persons Details : On date - Positive-		
xvii)	Total No. of Migrant (Other State + Other Dist. of WB):	: 00
xviii)	No. of Persons in Safe House:	: 00
xix)	No. of Person in Covid Hospital:	: 20
xx)	No. of Persons in Home Isolations:	: 405
Analysis on COVID-19 +Ve Cases :		
xxi)	Rate of Recovery# (Percentage)	: 76.74
xxii)	Rate of Mortality# (Percentage)	: 1.15

Table 1 showed the effects of biomedicine and the 'Common-Ecofriendly-Digital-Complex-Ecosystem'; the different types of animals with the regular students, teachers, guardian-communities, administrator, and visitors, will create the 'Joyful-Environment' with the enriched relationship between schools, parents, and their children, and help to build a brighter future for young people and our society as a whole, and the owls apparently act as a social keystone-species within these food-chain-relationships, consuming rats that spoil food items of mid-day-meals, store-rooms, and documents, and bats that make building dirty by their excreta. And it arouses the attraction of locality on ecology-food-chain-relationships-issues and improves sustainable-fishery, and kitchen-garden-management, micro-and macro- climate issues, and community health, and it plays the role of the simplest carnivore,

predating on juveniles and bats. And the present preventive treatment measures revealed that the potential-biomedicine meals are highly effective in controlling diseases by boosting natural immunity against coronavirus with no side-effects in the Kanchannagar D.N.Das school area, which is confirmed from; Figure 1 shows the daily press briefing of Purba Bardhaman (Date: 26/04/2021, up to 5.00 P.M.) as well as Burdwan Municipality with 76.74% recovery rate and 1.15 mortality rate.

Report on Sample Testing:		
xxiii)	Antigen Test	: 1648
xxiv)	RT-PCR Test	: 752
xiv)	Test Result within 24 Hrs.	: 1654 (RAT-1648+ RTPCR-6)

#On Total Positive Case

Part- II:

Distribution of COVID Positive Cases found on 26/04/2021

(Aushgram-I: 03, Aushgram-II: 02, Burdwan Municipality: 160, Bhatar: 20, Burdwan-I: 38, Burdwan-II: 16, Galsi-I: 11, Galsi-II: 03, Guskara Municipality: 02, Jamalpur: 12, Kalna Municipality: 19, Kalna-I: 07, Kalna-II: 14, Katwa Municipality: 02, Katwa-II: 01, Ketugram-I: 07, Ketugram-II: 10, Khandoghosh: 14, Manteswar: 05, Memari Municipality: 06, Memari-I: 10, Memari-II: 07, Mongolkote: 05, Purbasthali-I: 17, Purbasthali-II: 07, Raina-II: 01 & Other District: 26)

Analysis on COVID +Ve Cases on 26/04/2021		+COVID Positive as on today	**Total Positive Cases
Type	Symptomatic	20	1959
	Asymptomatic	405	14625
Total		425	16584
Contact Analysis	Primary Contact	00	1422
	Travel from High Burden Dist. of W.B.	00	217
	Travel from Other State	00	435
	No Travel History	425	14510
Total		425	16584

Figure 1: Daily Press Briefing of Purba Bardhaman (Date: 26/04/2021, up to 5.00 P.M.).



Plate 1: Vaccination, healthcare and treatments with awareness.



Plate 2: Different activities forming 'Common-Ecofriendly-Complex-Ecosystem' in school.

Future Research

The Kanchannagar D.N. Das High School (HS) and Dispensary, in a 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 biomedicines with ginger drinks or natural biomedicines at extremely ultra-low doses, for future research as follows [19,20]:

- Proven for many pharmacological activities.
- Due to low toxicity (LD50 = 3741.7 mg/kg) and high efficacy.

- Use as traditional medicines.
- Overcome various medical complications.

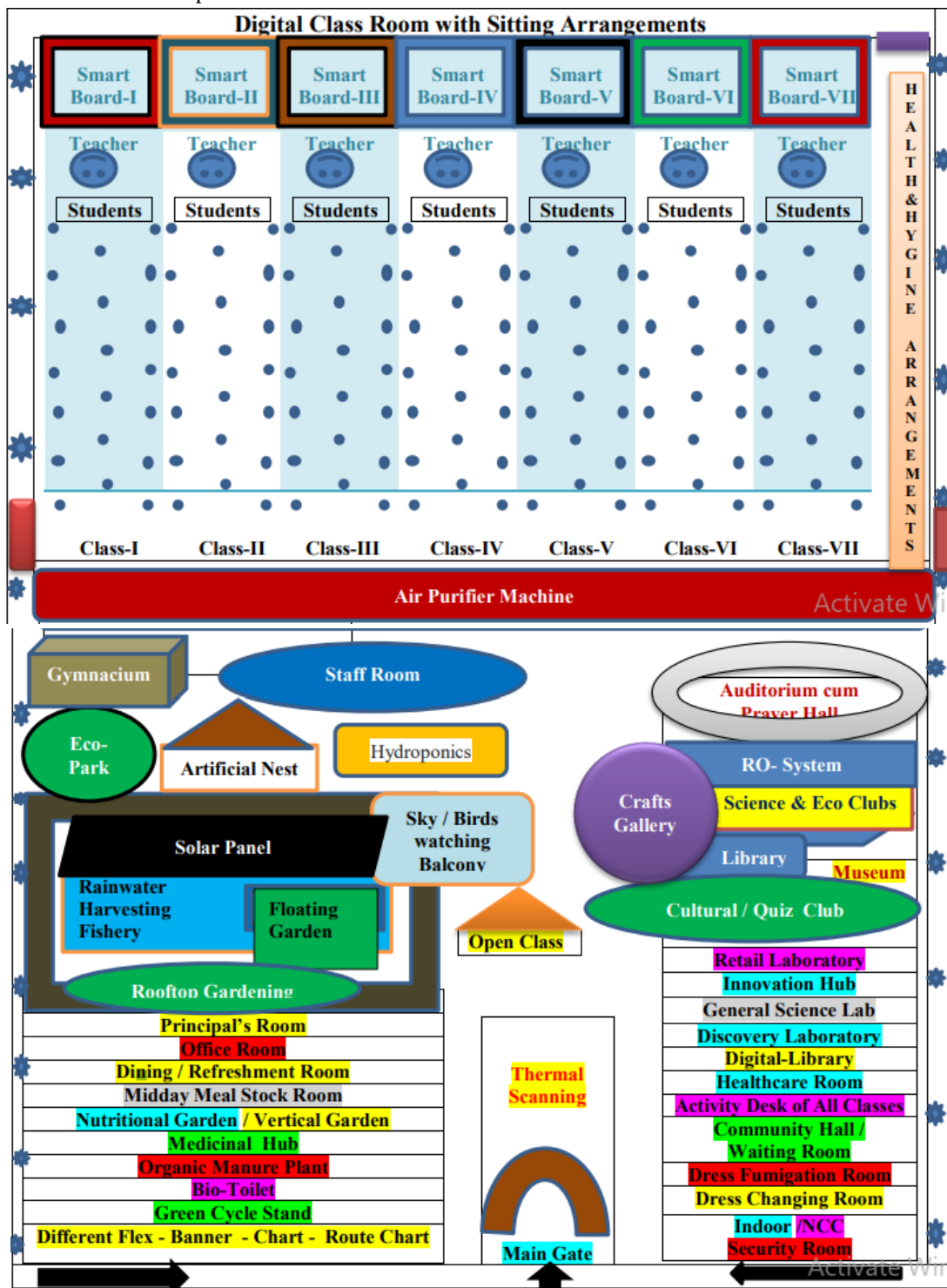


Figure 2: Diagrammatic representation of 21st century new normal school (Ref. 3).

- Present of various effective phytochemical constitutions.
- No side effects and some vaccines made from their phytoconstituents crossing the Avogadro limit.
- 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. Biomedicines not only prevent plant diseases but also improves 'Earth-Environmental-Health-Research-Science-Technology-Communication and May be Controlled 21st-Century Pandemic Diseases, where "Defeating the coronavirus will need high-level action against new destructive forces regarding COVID vaccines-time to confront anti-vax aggression" [22].

Conclusions

The Kanchannagar D. N. Das School and Dispensary, create a 'Common-Ecofriendly-Complex-Ecosystem' with eco-friendly modern green-digital-infrastructure and facilities attached with air-purifier, the priority- and moral-activity-based-education with online-and-offline-regular-digital-teaching-learning-process, maintaining COVID-19 protocol sitting arrangements, and the active interactive-involvement, and positive attitudes with maintaining equalities among students and communities regarding the digital-class in outside-and-inside, regular fumigation of all the rooms, campus including school-dress, mandatory taking the free-vaccine-nationalism-equity-passport for all students, parents, legal guardians and family member, regular consume easily digested-nutritious-biomedical-meals with fruits-and-ginger-drinks, transforming the 'Common-Activity-Based-Ecofriendly-Complex-Ecosystem-Model', and school prevails with the enriched joyful-teaching-learning-process, 'social determinants of health', and environment, biodiversity conservation, agriculture, science-technology-communication, socio-economy-welfare, where the owl act as keynote species, and where the bat confirm the clues to preventing-and-treating-COVID-19 by boosting the natural immunity, and helps to develop the future-policy or model; the 'Sustainable 21st-Century-Coronavirus-2 Resistance-Futuristic-School is the Mirror of the Society in the New Normal Situation Again'.

Acknowledgment

I am thankful to the eminent Physician Dr. Ranjan Mukherjee, MD, District Coordinator of Sishu Sathi Scheme at Department of Health and Family Welfare, Government of West Bengal, India and Dr. Dipanitwa Malik, M.B.B.S., Burdwan Medical College & Hospital, for inspiration, treatments, and help. I express my deep gratitude to Mr. Rakesh Khan, Secretary, and Mr. Subhendu Bose, President with all Young Green-Members of the "International NGO named Burdwan Green Haunter and Students' Goal" for arranging to many awareness programs on COVID-19. Last but not the least; I am thankful to the eminent educationist Sri Tapaprakash Bhattacharya for inspiration and guidance.

References

1. Medical News Today. COVID-19 live updates: Total number of cases passes 144 million. 2021.
2. Berman R. Gum disease linked to severe COVID-19 outcomes. Medical News Today. 2021.
3. Datta SC. New-Normal 21st-century-futuristic-green-digital-school-health prevent reinfection-coronavirus-2 by vaccine-nationalism-equity-passport bio-medicinal-meals-ginger-drinks submission to academia letters as preprint in ACADEMIA. 2021.
4. Datta SC. High-Diluted pharmacological-potential biomedicines prevent 21st century COVID-19 like pandemic: improved drugs-research biodiversity agriculture socio-economy. Am J Pharma. 2021; 4: 1031.
5. Datta SC. Weeds-vegetables and fruits act as potential biomedicines against covid-19: enriched agriculture biodiversity socio-economy science technology communications by controlling plants diseases. J Exp Biol Agric Sci. 2020; 8: 139-145.
6. Datta SC. Students Act as 21st century preventive-pandemic-COVID-19 Model: improved advance-clinical-toxicology biomedicine green-socio-economy science-technology-innovations. Adv Clin Toxicol. 2021; 6: 205.
7. Datta SC. Improved science and technology communications: Barn Owl act as social vaccine against COVID-19. Int J Latest Res Sci Tech. 2020; 9: 6-13.
8. Datta SC. Artificial-Nest Rainwater-Harvesting with Fishery and Floating-or-Rooftop-Gardening Act as 21st Century Civil-Engineering COVID-19 Epidemic-Model: Improved Biodiversity Agriculture Socio-Economic Environmental-Sciences Technology-Communication. J Civil Eng Environ Sci. 2020; 6: 022-036.
9. Datta SC. **Only environmental science act as natural biomedicine preventive epidemic model of 21st century pandemic diseases editorial note.** Environ Sci Ind J. 2021; 17: 177.
10. Datta SC. Amaranth Plant Protects Climate-Health-Development Socio-Economy Sciences-Technology-Communication: Act as Potential Biomedicine-Vaccine against Plant and 21st Century-Epidemic COVID-19 Diseases. Expert Opin Environ Biol. 2021; 10: 1.
11. Datta SC. 21st Century preventive non-medicinal-COVID-19-Students-Model: improved med life clinics sciences technology communication. Med Life Clin. 2021; 1: 1029.



12. Datta SC. NGO act as potential-policy-developer social-vaccine-COVID-19 epidemic-model until discovery-of-medical-vaccine: achieved green-socio-economic welfare science technology innovations. Arch Community Med Public Health. 2020; 6: 225-232.
13. Datta SC. Enriched science and technology communication economy in agriculture by use of acacia sides as potential bio-agents against various pathogens. Advances Agri, Horticulture Entomol. 2020; 2: 1-13.
14. Datta SC. Discovery of COVID-19 vaccine by using acaciades as a phytomedicine improving science and technology communication applications- An ideas. J Bio Sci Res. 2020; 2: 1-30.
15. Datta SC. Okra maybe potential cost-effective personalized-biomedicines social-vaccine against covid-19: improved immunity food-security green-economy science-and-technology-communication applications. Innovative J Med Sci. 2020; 4: 5-20.
16. Datta SC. Intercropped cowpea maybe use as biomedicine improved immunity against COVID-19: Enriching Science and Technology Communication Applications Food Security Economy. Diagnosis and Therapies Complementary and Traditional Medicine. 2020; 1: 35-48.
17. Datta SC. Weed-Plant Act as Vaccine against Plant-and-COVID-19 Diseases: Enriched-Agriculture-Health-Development Socio-Economy Sciences-Technology-Communication-Application. Int J Pharma Sci Clinical Res. 2021; 1: 1-17.
18. Datta SC. High-Diluted-potential-internal-biomedicines zingiber officinale extract prevent 21st-century pandemic: enriched drugs health socio-economy. Submission to United J Int Med. 2021.
19. Datta SC. Immediate apply cost-effective easily preparable-available 21st century potential –ayurvedic-herbal-integrative-medicine-vaccine of COVID-19: achieved agriculture healthcare-socio-economy science technology communication mechanism. Int J Res Granthaalayah. 2021; 9: 227–247.
20. Datta SC. Cina-Pretreatments Act as Potential-Biomedicine-Vaccine against COVID-19 and Okra-Plant-Diseases: Synthesis PR-Proteins Increased-Immunity Improved Biomedicines-Economy Applications Science-Technology-Communications. Int J Ayur. 2020; 5: 05-26.
21. Datta SC. Nematode extract and acaciasides use as preventive biomedicines against plant diseases: improved earth-environmental-health-research science-technology-communication and may be controlled 21st-century pandemic diseases. Earth Environ Sci Res Rev. 2021; 4: 55-60.
22. Hotez P. World view, COVID vaccines: time to confront anti-vax aggression. Nature. 2021; 592: 661.