



## Alternative Medicine-Based COVID-19 Therapy: Lesson from a Bangladeshi Patient

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### Abstract

Though COVID-19, caused by SARS-CoV-2, has been plaguing the current world, western medicine has not been found effective against SARS-CoV-2. Time is up for thinking outside the box and to incorporate traditional medicine for combined therapeutic approaches. Case study of a COVID-19 survivor, who undertook this approach and came round soon, has been reported here. This case report points towards utilization of scientifically proven traditional medicine for overcoming pandemics like COVID-19.

**Keywords:** *Alternative medicine; Anti-viral drug; COVID-19; Camellia sinensis; Ganoderma lucidum; Nigella sativa; Ocimum sanctum; Zinziber officinale*

### Introduction

Traditional medicines are rich sources of drugs [1]. As the COVID-19 disaster is rife and western drugs have not been able to halt its sojourn, pragmatic approach towards combination of traditional and western medicine seem apt in withstanding COVID-19 pandemic [2]. World health organization (WHO) recommended several strategies and medication for alleviating COVID-19. Among them, scientifically proven traditional medicine has received WHO's support for usage in COVID-19 cases [3]. China, the birth place of COVID-19, has been promoting TM against COVID-19 complications [4,5].

Following WHO's a guideline, Bangladesh has been strategizing different measures like lock down, social distance maintaining, avoidance of public gathering. Still, the rate of COVID-19 infection and associated death is skyrocketing. In this situation, survival knowledge from those recovered from COVID-19 would shed light in prognosis and diagnosis of COVID-19 as well as formulating strategies against this global enemy. Thus, the case study of a Bangladeshi person, who has overcome COVID-19, has been called attention to the global to buttress human endeavor against this pandemic.

### Case Report

The patient was a 40-year-old man without any significant medical history or comorbidities. On May 16 at 9:00 a.m., 2020, he had joined his duty with a history of 3 days runny nose. Following day at 10:00 am, he suddenly developed fever and shortness of breath and rushed to the nearby COVID-19 testing center. He had neither history of direct contact with COVID positive patients nor of traveling to

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COVID prone areas at homeland nor of out of his homeland. During testing, his vital signs were : blood pressure 122/78 mmHg, heart rate 90 beats/min, body temperature 38.2 °C, respiratory rate 18 breaths/min, and oxygen saturation on room air 94%. Health workers of the COVID testing center collected his throat swab for RT-PCR analysis. Next day, he had been reported with COVID positive. He had been granted medical leave from his job and suggested for isolation for at least fourteen days.

He would live in a dormitory and arrangements had been made for isolation and quarantine him. His living room was a studio apartment and a person-in-charge would reach meals and drinks taking necessary cautions such as wearing masks, gloves, special jackets, googles. Plates and glasses that he would use had regularly been cleaned with washing soap, detergents and disinfectants. Physicians would monitor his body temperature, blood pressure, respiratory rate, pulse rate and oxygen saturation level regularly. He had been prescribed with medicines usually applied against common cold. He had been suggested to gargle with hot water mixed with table salt (NaCl) five times a day. Physicians recommended the following drugs for him: paracetamol (500 mg); ivermectin (12 mg, once); doxycycline hydrochloride (100 mg, twice daily for seven days); fexofenadine hydrochloride (6 mg, twice daily for 3 days) vitamin B complex, vitamin D, E. Intake of ample citrus fruits containing vitamin C, liquids, milk and two eggs per day had been suggested for him. As he had experience of coughing, he had been prescribed decoughing drug (dextromethorphan hydrobromide, phenylephrine hydrochloride and triprolidine hydrochloride syrup). Besides, he would chew locally available decoughing agent clove (*Syzygium aromaticum*), the leaves of holy basil or tulsi (*Ocimum sanctum*) and drink green tea (*Camellia sinensis*) mixed with zingiber (*Zingiber officinale*). He would also drink a tablespoon of honey along with black seed (*Nigella sativa*) every morning. Besides, he would put two table spoon of reishi mushroom (*Ganoderma lucidum*) powder in about 300 ml of boiling water for 5 minutes, would filtrate the residue and drink the liquid.

His experience: His most notable problem was difficulty in breathing, little pain in throat, pain in knee joints, muscle cramps, anorexia, nausea and weakness. As he was aloof, he broke down psychologically feeling despair of life and going to die soon. Family members, friends and relatives would sympathize him regularly over cell phone and would suggest never getting frustrated. He had been provided information that many people, though tested positive, have come round and are running normal lives. He had been suggested performing religious activities much devotedly than before and to seek recovery from Almighty Creator.

On day 5 of his isolation, he felt less difficulty in breathing and his fever improved. Similar condition persisted on day 6 and 7. On day 8, his breathing became normal and fever removed. On day 9 and 10, his throat swab had been collected for RT-PCR analyses. Both samples reported COVID negative results. He had been informed of his improvements and psychological supports continued. He had been advised for physical exertion to avoid sedentary life style. He had been told that he could come out of isolation on or after day 14 but he decided to remain for more few days. He remained in isolation for 21 days. Currently, he is performing normal life except feeling fatigue.

**Lesson from this COVID-19 survivor:** Bio-components present in tulsi, green tea, zingiber, black seed and reishi mushroom might confer additive benefit to the prescribed medication. Antioxidants, anti-inflammatory agents, vitamins, minerals and other bio-components present in these food and drinks seem promising in combating COVID-19 [6-12].

### Conclusion

Suppression of SARS-COV2 replication by effective antiviral drugs seems to be the key to preventing COVID-19 morbidity and mortality. As no specific drug has been found effective in this endeavor, combined therapeutic approach would be pertinent for synergistic effect. In this context, utilization of traditional medicines already established for anti-viral, anti-influenza, anti-oxidative effect spur high. Thus, incorporation of *O. sanctum*, *C. sinensis*, *Z. officinale*, *N. sativa* and *G. lucidum* in treatment protocol against COVID-19 beacon promising.

**Consent:** Written consent (seeking anonymity) had been collected from the COVID-19 survivor, his caregivers, the physicians and medical assistants for publishing this report.

**Conflict of Interest:** Authors declare no conflict of interest.

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### References

1. Yuan H., *et al.* "The Traditional Medicine and Modern Medicine From Natural Products". *Molecule* 21.5 (2016): 559-568.
2. Clevenger S. "Thinking outside the Box: Could there be a Plant-Based Treatment for Coronavirus Infections? A Review of the Literature". *OBM Integrative and Complementary Medicine* 5.2 (2020): 16.
3. <https://www.afro.who.int/news/who-supports-scientific-proven-traditional-medicine>
4. Diagnosis and Treatment Protocol for Novel Coronavirus Pneumonia. *Released by National Health Commission & State Administration of Traditional Chinese Medicine* 2020.
5. Xu J and Zhang Y. "Traditional Chinese Medicine Treatment of COVID-19". *Complementary Therapies in Clinical Practice* (2020): 39.
6. Prakash P, Gupta N. "Therapeutic Uses of Ocimum Sanctum Linn (Tulsi) With a Note on Eugenol and Its Pharmacological Actions: A Short Review". *The Indian Journal of Physiology and Pharmacology* 49.2 (2005): 125-131.
7. Ghosh R., *et al.* "Evaluation of Green Tea Polyphenols as Novel Corona Virus (SARS CoV-2) Main Protease (Mpro) Inhibitors - An in silico Docking and Molecular Dynamics Simulation Study". *Journal of Biomolecular Structure and Dynamics* (2020): 1-13.
8. Rathinavel T., *et al.* "Phytochemical 6-Gingerol – A promising Drug of choice for COVID-19". *International Journal of Advanced Science and Engineering* 6.4 (2020): 1482-1489.
9. <https://clinicaltrials.gov/ct2/show/NCT04347382>
10. Suwannarach N., *et al.* "Natural Bioactive Compounds from Fungi as Potential Candidates for Protease Inhibitors and Immunomodulators to Apply for Coronaviruses". *Molecules* 25.8 (2020): 1800.
11. Zhu Q., *et al.* "Anti-influenza effects of Ganoderma lingzhi: An animal study". *Journal of Functional Foods* 34 (2014): 224-228.
12. Paterson RR. "Ganoderma - A Therapeutic Fungal Biofactory". *Phytochemistry* 67.18 (2006): 1985-2001.

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