

वैद्य राजेश कोटेचा Vaidya Rajesh Kotecha स्वच्छ भारत

एक कदम स्वच्छता की ओर



सचिव भारत सरकार

आयुर्वेद, योग व प्राकृतिक चिकित्सा यूनानी, सिद्ध, सोवा रिग्पा एवं होम्योपैथी (आयुष) मंत्रालय आयुष भवन, 'बी' ब्लॉक, जी.पी.ओ. कॉम्प्लेक्स, आई.एन.ए, नई दिल्ली–110023

SECRETARY

GOVERNMENT OF INDIA

MINISTRY OF AYURVEDA, YOGA & NATUROPATHY
UNANI, SIDDHA, SOWA-RIGPA AND HOMOEOPATHY (AYUSH)
AYUSH BHAWAN, B-BLOCK, GPO COMPLEX
INA, NEW DELHI-110023

Tel.: 011-24651950, Fax: 011-24651937

D.O. No. S. 16030/18/2019 -NAM

Dated: 06th March, 2020

As you are aware, incidences of Corona Virus (COVID-19) have been reported worldwide and 30 Positive cases of Corona Virus have also been reported in India till date. Even though there is no panic response warranted, AYUSH being one of the important Ministry equipped for providing appropriate response to the circumstances arose due to this public health challenge, it is worthwhile to associate with other Stake holders in eliciting AYUSH based public health response considering the strength and evidences of these systems. In the past also, interventions under AYUSH systems had been varyingly used for making an effective public health response in similar situations faced in many States/UTs.

Keeping in view, Ministry of AYUSH with the recommendations from Research Councils under its administrative control has come out with an advisory (Copy enclosed as **Annexure-I**) which may be communicated /implemented through AYUSH personnel and facilities as per the prevailing system of medicine in your State/UT.

These interventions from different AYUSH systems of medicine are supported with evidences for promotion of immunity and help in improving the respiratory symptoms in similar diseases. In this regard, a separate list of references is also enclosed at **Annexure-II** for your ready reference.

Therefore, I request you to do the needful for appropriate roll out of this strategy in consultation with other stake holder departments responsible for Public Health in your State/UT.

Encl: as above

Yours sincerely,
-Sd/(Rajesh Kotecha)

To,

Chief Secretaries of all States/UTs.

Copy to:

- Principal Secretary AYUSH/Health of all States/UTs
- 2) Director/Commissioner/Mission Director (AYUSH) of all States/UTs.

RAJESH KUMAR KOTECHA Digitally signed by RAJESH KUMAR KOTECHA Date: 2020.03.06 19:25:05 +05'30'

(Rajesh Kotecha)

ARISING OUT OF SPREAD OF CORONA VIRUS (COVID-19) IN INDIA

Corona viruses (CoV) are a large family of viruses that cause illness ranging from the common cold to more severe diseases such as Middle East Respiratory Syndrome (MERS-CoV) and Severe Acute Respiratory Syndrome (SARS-CoV). The new Corona virus disease (COVID-19) was first reported from Wuhan, China, on 31 December 2019. 72 countries reported COVID-19 incidence with 90,870 confirmed cases and 3112 deaths as per WHO factsheet as on 03.03.2020. As on 03.03.2020, 05 confirmed cases are reported in India from various parts.

Common signs of infection include fever, cough, myalgia, fatigue and breathing difficulties. In more severe cases, infection can cause pneumonia, severe acute respiratory syndrome, kidney failure and even death.

The function of the immune system is critical in the human response to infectious disease. Viral infections induce oxidative stress and cause damage to airway epithelial cells. A growing body of evidence identifies stress, nutrition and immunity as a cofactor in infectious disease susceptibility and outcomes. The mainstay in management of corona viral infections has been supportive care, nutrition and preventing further progression in the absence of any antiviral agent or vaccine.

During Ebola outbreak in 2014 expert group of WHO has recommended that "it is ethical to offer unproven interventions with as yet unknown efficacy and adverse effects, as potential treatment or prevention" keeping in view no vaccine or anti-virals were available.

Approach of AYUSH systems:

The holistic approach of AYUSH systems of medicine gives focus on prevention through lifestyle modification, dietary management, prophylactic interventions for improving the immunity and simple remedies based on presentations of the symptoms.

The AYUSH approach to manage the outbreak broadly comprise of:

- i. Preventive and prophylactic
- ii. Symptom management of COVID-19 like illnesses
- iii. Add on Interventions to the conventional care

Based on potential & strength of AYUSH systems supported by evidences for promotion of immunity and help in improving the respiratory symptoms in similar diseases and as per the recommendations from the research councils under Ministry of AYUSH following system wise approach is recommended:

Siddha System of Medicine

i. **Preventive and prophylactic**:

Nilavembu Kudineer decoction 60 ml twice a day for 14 days. The medicine contains aqueous extract of *Andrographis paniculata* and others.

ii. Symptom management of COVID -19 like illnesses

Nilavembu Kudineer / Kaba Sura Kudineer decoction 60 ml twice a day

Adathodai Manapagu - Syrup 10 ml twice a day

iii. Add on Interventions to the Conventional Care

Visha Sura Kudineer decoction 60 ml twice a day

Kaba Sura Kudineer decoction 60 ml twice a day

All these medicines should be taken in consultation with qualified physician of Siddha system of Medicine.

General preventive measures (already notified):

- i. Observe good personal hygiene.
- ii. Practice frequent hand washing with soap.
- iii. Follow respiratory etiquettes cover your mouth when coughing or sneezing.
- iv. Avoid close contact with people who are unwell or showing symptoms of illness, such as cough, runny nose etc.
- v. Avoid contact with live animals and consumption of raw/undercooked meats.
- vi. Avoid travel to farms, live animal markets or where animals are slaughtered.
- vii. Wear a mask if you have respiratory symptoms such as cough or runny nose.

In addition, the following AYUSH specific measures may be adopted:

The diet should be fresh, warm, easy to digest, containing whole cereals, seasonal vegetables etc. Frequent sipping of water boiled with Tulsi leaves, crushed ginger, and turmeric would be beneficial. Honey with a pinch of pepper powder is also beneficial in case cough. Cold, frozen and heavy foods may be best avoided. It is always beneficial to avoid direct exposure to cold breeze. Appropriate rest and timely sleep are advisable. The practice of Yogasana and Pranayama under the guidance of qualified Yoga instructor is recommended.

Common medicinal plants useful in similar symptoms are Tulsi (*Ocimum sanctum*), Guduchi (*Tinospora cordifolia*), Ginger (*Zingiber officinale*) and Turmeric (*Curcuma longa*)

References for Interventions of different AYUSH systems of medicines for promotion of immunity and help in improving the respiratory symptoms

- Pedersen A, Zachariae R, Bovbjerg DH. Influence of Psychological Stress on Upper Respiratory Infection—A Meta-Analysis of Prospective Studies. Psychosom Med [Internet]. 2010 Oct [cited 2020 Mar 4];72(8):823–32. Available from: http://journals.lww.com/00006842-201010000-00014.
- 2. JENSEN MM, RASMUSSEN AF. Stress and susceptibility to viral infections. II. Sound stress and susceptibility to vesicular stomatitis virus. J Immunol [Internet]. 1963 Jan 1 [cited 2020 Mar 4];90(1):21–3. Available from: http://www.ncbi.nlm.nih.gov/pubmed/13957641.
- 3. WHO. Ethical considerations for use of unregistered interventions for Ebola virus disease (EVD) https://www.who.int /media centre/news/statements /2014/ebola-ethical-review-summary/en/.
- 4. Dinesh Kumar *et al.* A review of immunemodulators in the Indian traditional health care system Journal of Microbiology, Immunology and Infection, Volume 45, Issue 3, June 2012, Pages 165-184.
- 5. Winston J. The Faces of Homeopathy. Wellington, New Zealand: Great Auk Publishing; 1999.
- 6. Dewey W. A.. Homeopathy in influenza—A chorus of fity in harmony. Journal of the American Institute of Homeopathy 1920-21; 13: 1038-1043.
- 7. Sharma, A.; Chadha, N.K.; Das, S.K.; Sen, A.; Roy, S.D.; Chanu, T.I.; Sawant, P.B.; Prakash, C. Tinospora cordifolia extract induced effects on cellular immune reactions of labeorohita (hamilton) challenged against aeromonas hydrophila. Int. J. Pure Appl. Biosci. 2017,5,765–775. [Cross Ref].
- 8. Kalikar MV, Thawani VR, Varadpande UK, Sontakke SD, Singh RP, Khiyani RK. Immunomodulatory effect of Tinospora cordifolia extract in human immuno-deficiency virus positive patients. Indian J Pharmacol 2008;40 (3):107-10.
- 9. More, P.; Pai, K. Immunomodulatory effects of Tinospora cordifolia (Guduchi) on macrophage activation. Biol. Med. 2011, 3, 134–140.

- 10. G.S.Lekha et.al. An Interventional Cohort Study in Dengue Prevalent Area by Using Nilavembu Kudineer and Awareness Programme "IOSR Journal of Dental and Medical Sciences (IOSR-JDMS), Volume 17, Issue 2(2018),PP (19-23).
- 11. Christian GJ *et.al*: Protective Effect of Poly Herbal Siddha Formulation Nilavembu Kudineer against common Viral Fevers Including Dengue A case Control Approach. Int J Pharm Sci Res 2015; 6(4):1656-60.
- 12. Kalaiarasi *et.al.* A combination of Nilavembu Kuidineer and Adathodai Manapagu in the Management of Dengue Fever. International Journal of Current Research, Vol 5, Issue 4, PP 978-981 2013.
- 13. The medical importance of Cydonia oblonga- A review Prof Dr Ali Esmail Al-Snafi Department of Pharmacology, College of Medicine, Thi qar University, Nasiriyah, P O Box 42, Iraq IOSR Journal Of Pharmacy www.iosrphr.org (e)-ISSN: 2250-3013, (p)- ISSN: 2319-4219 Volume 6, Issue 6 Version. 2 (June 2016), PP. 87-99.
- 14. Hamauzu Y, Yasui H, Inno T, Kume C, Omanyuda M. Phenolic profile, antioxidant property, and anti-influenza viral activity of Chinese quince (Pseudocydonia sinensis Schneid.), quince (Cydonia oblonga Mill.), and apple (Malus domestica Mill.) fruits. J Agric Food Chem. 2005 Feb 23;53(4):928-34.
- 15. Hong EH, Song JH, Kang KB, et al. Anti-influenza activity of betulinic acid from on influenza A/PR/8 virus. *Biomol Ther*. 2015;23(4):345–349. doi:10.4062/biomolther.2015.019.
- 16. Chi A, Kang C, Zhang Y, Tang L, Guo H, Li H, Zhang K. Immunomodulating and antioxidant effects of polysaccharide conjugates from the fruits of Ziziphus Jujube on Chronic Fatigue Syndrome rats. Carbohydr Polym. 2015 May 20;122:189-96. doi: 10.1016/j.carbpol.2014.12.082. Epub 2015 Jan 14.
- 17. Ali WR, Al-Asady ZT and Ibrahim AA. Immunomodulatory of Cordia myxa (L.) aqueous extract fruit in immunized mice with hydatid cyst fluid. Journal of Natural Science Research 2015; 5(10): 75-83.
- 18. Ad-Dahhan HAA. Detection of Immunomodulatory activity of alcoholic extract of Cordia myxa (L.) fruit. AL-Qadisyia Journal of Applied Sciences 2010; 15(4): 1-8.

- 19. Al-Bayaty MAA and Al-Tahan FJ. Mechanism of the tracheal smooth muscle relaxant activity of the Cordia myxa plant extract in sheep. Iraqi Journal of Veterinary Medicine 2008; 32(2): 214-226.
- 20. Afzal M, Obuekwe C, Khan AR and Barakat H. Antioxidant activity of Cordia myxa L. and its hepato protective potential. EJEAF Che 2007; 8(6): 2236-2242.
- 21. Bellavite P, Signorini A, Marzotto M, Moratti E, Bonafini C, Olioso D. Cell sensitivity, non-linearity and inverse effects. Homeopathy. 2015 Apr;104(2):139-60.
- 22. Srikanth Narayanam & K.D.Sharma, &R.K.Shingal, &G.Veluchamy, Effect of AYUSH-64 in the treatment of Malaria. 2001.
- 23. Divya Kajaria, Nasreen Ahmed and Deepak Bhati. Evaluating Clinical Efficacy of Ayurvedic Inhalation Therapy (Aerosol) and Rasayan Therapy in the Management of COPD A Randomized Cohort Control Clinical Study. The Lancet Respiratory Medicine. The lancetrm-D-19-00759.
- 24. Dalvi et al. LITERARY REVIEW OF ANU TAILA NASYA, UJAHM 2015, 03 (02): Page 42-45.
- 25. Saravanan J *et.al.* Anti Inflammatory, Anti Pyretic and Anti bacterial Study of Kabasura kudineer Chooranam. International Journal of Current Advanced Research, Vol 7; Issue 2,2018.
- 26. Shailajaet.al.A Review on Poly herbal Formulation Visha Sura Kudineer Chooranam A Classical Anti –Viral Used in Siddha System, European Journal of Pharmaceutical and Medical Research, 2017, 4 (9), 184-192.
- 27. Chakraborty P S, Lamba C D, Nayak D, John M D, Sarkar D B, Poddar A, Arya J S, Raju K, Vivekanand K, Singh H B, Baig H, Prusty A K, Singh V, Nayak C. Effect of individualized homoeopathic treatment in influenza like illness: A multicenter, single blind, randomized, placebo controlled study. Indian J Res Homoeopathy 2013;7:22-30.
- 28. Shailaja *et.al.* A Review on Polyherbal Formulation Visha Sura Kudineer Chooranam A Classical Anti –Viral Used in Siddha System, European Journal of Pharmaceutical and Medical Research, 2017, 4 (9), 184-192.
- 29. Marc Maurice Cohen. Tulsi *Ocimum sanctum*: A herb for all reasons. J Ayurveda Integr Med. 2014 Oct-Dec; 5(4): 251–259.

- 30. Sharma *et al.* Therapeutic Vistas of Guduchi (*Tinospora cordifolia*): a medicohistorical memoir. The Journal of research and education in Indian medicine XX(2):113-28 · April 2014.
- 31. Dr Anant Saznam, Dr Satyendra Kumar Singh. Review of Shunthi (*Zingiber officinale* Rosc.) in Ayurvedic Literature. Journal of medical science and clinical research. Volume 05 Issue 09 September 2017.
- 32. Krup V, Prakash LH, Harini A (2013). Pharmacological Activities of Turmeric (*Curcuma longa linn*): A Review. J Homeo Ayurv Med 2:133. Doi: 10.4172/2167-1206.1000133.
- 33. Chandrasekaran, C. V., Sundarajan, K., Edwin, J. R., Gururaja, G. M., Mundkinajeddu, D., & Agarwal, A. (2013). Immune-stimulatory and anti-inflammatory activities of *Curcuma longa* extract and its polysaccharide fraction. Pharmacognosy research, 5(2), 71-9.