Cross Current International Journal of Medical and Biosciences
Abbreviated Key Title: Cross Current Int J Med Biosci
ISSN: 2663-2446 (Print) & Open Access

Volume-2 | Issue-4 | April, 2020 |

Review Article

COVID-19- A Management through Traditional Way: A Review

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Received: 06.04.2020
Accepted: 25.04.2020
Published: 29.04.2020

Abstracts: Unless and until a proper solution is made and adopted in the health care delivery systems throughout the world to combat COVID-19, some experimental drugs are employed everywhere on the globe in the management of COVID-19. Number of times chemical drugs have proven fatal as well, unfortunate part is "drug induced fatalities" if we are not wrong these fatalities are included in the number of deaths due to COVID-19. The need of the hour is to reduce morbidity and mortality from COVID-19/ COVID-19 drugs. Our motive is to design a formulation which can not only provide the symptomatic relief but will act as anti-retroviral and at the same time will be safe for oral administration. This review paper is based on the same ideology. We have designed a decoction, a diet module and a formulation for inhalation with scientific evidences. That is why we choose only those herbs in formulation which are strongly anti-retroviral. The herbs with weak potency were excluded otherwise there are more than seventy-five herbal drugs with similar actions. Many times, we need booster doses when virus is quantitively or qualitatively more virulent that is why we have given emphasis to the anti-retroviral diet so that the better result is achieved. The purpose of inhalation is the Nano particles of herbs shall reach easily to the target tissues.
Keywords: COVID-19, Novel Corona Virus, Unani in COVID-19, ART, corona, Herbal Anti-retroviral.

INTRODUCTION

In Italy we know the Doctor population ratio is highest in the world (1:170), USA is having the world's best & advanced health care system and both the countries are fallowing proper guidelines of WHO. We see the result more dangerous in USA and Italy than in china where they adopt Chinese traditional medicine as adjuvant or contemporary to combat the COVID-19. The difference between china and USA/ Italy is that china has almost controlled the disease & USA/ Italy are badly hit by COVID-19. Such a situation is giving a big message that only large number of doctors and most advanced health care system is not sufficient to save human lives from COVID-19 like diseases.

The traditional Indian system of medicine is thousands of years old art of healing based on different philosophy advocating natural medicine or natural types of remedies containing treasure of wisdom. Once we start to utilize our ancient Wisdom, we can do far better than those (china) who have achieved less morbidity & motility in combating the COVID-19 disease.

The AYUSH system of medicine is now the ray of hope when we see towards the modern world. Concerned AYUSH ministry has invited us for the project proposal that is why we are sharing our knowledge, thoughts & experiences, to save premature deaths due to COVID-19 like disease.

Quick Response Code

Journal homepage:
https://crosscurrentpublisher.com/ccijmb/

DOI : 10.36344/ccijmb.2020.v02i04.005

Unani is also a Natural art of healing under Ministry of AYUSH in India. A unani physician means "Hakeem" can be described as practitioner with wisdom.

We the Unani physician out of our knowledge, experiences, judgment suggest the treatment of COVID-19 into three categories as under.

1. **Decoction-** A water extract of the herbs with anti-retro viral, bronchodilator, cough expectorant, mucolytic, antiseptic, antipyretic and immunomodulator properties.
2. **Inhalation** - Inhalation with bronchodilator, anti-viral, decongestant, cough expectorant, mucolytic herbal plants responsible to provide feel good apart from anti-retroviral effects.
3. **Dietotherapy** - Dietotherapy means a balanced diet plan including nuts, legumes, beans having activity of protease inhibitor, anti-inflammatory, anti-viral, Immunomodulator, expectorant with properties of detoxification.

We are trying to justify our proposal on scientific basis. The line of treatment of COVID-19 should be as under. (Table-01)

Table-01-Treatment plan chart

Oral therapy (Joshanda)	Drugs for Inhalation therapy	Dietotherapy (In addition to WHO dietary recommendation)
1) Ustekhudoos	1- Tukhm-e-Rehaan	a) Lehsun
2) Arjun	2- Darchini	b) Rajma
3) Halella	3- Kalaunji	c) Kulthi
4) Asl-e-soos	4- Sat-e-Pudina	d) Karela
5) Kalaunji	5- Ustekhudoos	e) Adrak
6) Badranjboya	6- Sat-e-Leemu	f) Haldi
7) Kakdasinghi		g) Darchini
8) Darchini		h) Honey
9) Honey		

1- Decoction - Decoction of recommended herbal formulation with synergistic effect may be proven more potent. (Table-02)

Table No. 02- Drugs used for Decoction as per classical Unani Literature

S. No.	Name of Drugs	Doses
1	Ustekhudoos	3-5 gm
2	Arjun	3-5 gm
3	Halella	3-5 gm
4	Asl-e-soos	3-5 gm
5	Kalaunji	2-4 gm
6	Badranjboya	2-4 gm
7	Kakdasinghi	2-3 gm
8	Darchini	2-3 gm
9	Honey	5 ml

2- Inhalation- Formulation for inhalation is based on decongestant, anti-tussive, anti- microbial and antiretroviral properties. (Table-03)

Table No. 03- Drugs used for Inhalation or steam as per classical Unani Literature

S. No.	Name of Drugs	Doses
1	Tukhm-e-Rehaan	3 gm
2	Darchini	1 gm
3	Kalaunji	2gm
4	Sat-e-Pudina	15 mg (One chawal)
5	Ustekhudoos	3 gm
6	Sat-e-Leemu	15 mg (One chawal)

3- Dietotherapy- In addition to WHO recommended diet we need to add some important foods rich in vitamin C, Selenium, foods with anti-retroviral effects, immunomodulator, bronchodilators, cough expectorant or cough suppressant properties, we suggest some foods as under.
Lehsun, Rajma, Kulthi, Karela, Adrak, Haldi, Darchini and Honey.

Table-04- Medicinal properties of some drugs and their scientific studies

S.No.	Unani Name	Botanical Name	Scientific study	Action as per Unani Pharmacopoeia
1	Ustekhudoos	Prunella vulgaris	A- Hot water extract of crude drug P. vulgaris suppress the replication of RNA virus (HIV-1 more strongly than cold water extract) (Yamasaki, K. *et al*., 1993) B- Derivatives of natural 3-hydroxy triterpenes, i. e, 3-oxoursolic acid, 11-oxoursolic acid,3,11-dioxoursolic acid,3-oxobetulinic acid and 3-oxopomolic acid, isolated from P.vulgaris and Sanguisorba officinalis, exhibited increased anti-HSV-1 activity in vitro, four to ten times as much as corresponding 3-hydroxy compounds.**(** Ryu, S. Y *et al*., 1993**)** C- The plant was primarily used in the past as a remedy for alleviating pains in the throat, fevers and for accelerating wound healing. The plant, with its high content of rosmarinic acid, immunomodulatory effects of the polysaccharide prunelline and antiviral activity of some of its constituents, has a great potential from the viewpoint of therapeutical applications.**(** Marková, H., Sousek, J., & Ulrichová, J. 1997**)** D- An anionic polysaccharide, isolated from this Chinese herb by hot water extract, ethanol precipitation and gel permeation column chromatography, was found to be active against herpes simplex virus type 1 and 2 (HSV-1 and HSV-2) at 100µg/ml but inactive against cytomegalovirus, the human inflenza virus types A and B, the poliovirus type 1 or the vesicular stomatitis virus. The 50% plaque reduction does of the polysaccharide for HSV-1 and HSV-2 was 10 µg/ml. The polysaccharide isolated from P.vulgaris showed specific activity against HSV and its mode of action appeared to be different from other anionic carbohydrates, such as heparin. **(**Xu, H *et al*.,1999**)**	*Munnaqi-e-Fuzlaate Dimagh* (Drug clearing vitiating humour from brain), *Muqawwi-wa-muharriqe asaab* (Nervine tonic and stimulant).
2	Arjun	Terminalia arjuna	A- Casuarinin, a hydrolyzable tannin isolated from the bark of T. arjuna, was investigated for its antiviral activity on herpes simplex type-2 (HSV-2) in vitro. Results showed that the IC_{50} of casuarinin in XTT and plaque reduction assays were 3.6 + 0.9 and 1.5 + 0.2 µM. casuarinin continued to exhibit antiviral activity even when added 12 h after infection. This study concluded that casuarinin possessed anti-herpesvirus activity and that it acted by inhibiting viral attachment and penetration, and also by	*Muharreq-e-Qalab* (Cardiac stimulant), *Muqawwi-e-Qalab* (Cardiac tonic).

			disturbing the late event(s) of infection. **(**Cheng, H. Y *et al*., 2002**)**	
3	Halella	Terminallia chebula	A- The potential antiviral against the duck hepatitis B virus (DHBV) were investigated using aquas extract of T.chebula, Sanguisorba officinalis, Rubus corneanus and Rehum palmatum. Although all extracts demonstrated antiviral activity against DHBV, T.chebula appeared to exhibit highest antiviral activity.**(**Chang TH *et al*., 1997**)** B- Aqueous extracts, prepared from T.chebula, S. officinalis, R. coreanus and R.palmatum, decrease the level of extracellular hepatitis B virus (HBV) virion DNA at concentrations ranging from 64-128 µg/ml and inhibited the production of hepatitis B dose dependently. T. chebula exhibited the most prominent anti-HBV activities.**(** Kim TG *et al*., 1999**)** C- The antiviral effect of aqueous extract of the plant was examined by a cell culture system using hepatitis B virus (HBV) producing cell line, HepG2 2.215. The extract was assayed for inhibition of HBV multiplication by measurement of HBV DNA and surface antigen (HBsAg) levels in the extracellular medium of HepG2 2.2.15 cells after an eight-day treatment. T.chebula exhibited significant anti-HBV activities. Aqueous extracts of S.officinalis , R. coreanus and R.palmatum were also found to be active.**(** Kim, T. G *et al*., 2001**)** D- Gallic acid and three galloyl glucoses, isolated from T.chebula fruits, were found to be inhibitors of human immunodeficiency virus type-1 (HIV-1) integrase. Flavonol glycoside gallates from Euphorbia pekinensis exhibited similar activity. The importance of galloyl moiety has been discussed.**(** Ahn, M. J *et al*., 2002**)**	*Muqawwi-e-Dimagh* (Brain tonic), Muqawwi-e-Basar (Eye tonic), *Musakkin* (Relaxant), *Muqqawi-e-Meda wa amaa* (Digestive tonic).
4	Aslasoos	Glycyrrhiza glabra	A- Glycyrrhizic acid, a component of G.glabra roots, was found to be active against viruses. It inhibited growth and cytopathology of several unrelated DNA and RNA viruses, while not affecting cell activity and ability to replicate. In addition, glycyrrhizizc acid inactivated herpes simplex virus particles irreversibly.**(** Pompei, R *et al*.,1979**)** B- The antiviral action of glycrrhizin on varicella-zoster virus (VZV) was investigated in vitro. When human embryonic fibroblast (HEF) cells were	*Munzij* (Concoctive), *Muqawwi-e-Asab* (Nervine tonic), *Mohallil-e-Waram* (Anti-inflammatory), *Munaffis-e-Balgham* (Expectorant), *Kasir-e-Riyah* (Carminative), *Mudirr-e-Baul* (Diuretic), *Mudirr-e-Haiz* (Emmenagogue).

			treated with glycyrrhizin after inoculation with virus (post treatment), the average 50%-inhibitory dose (ID_{50}) for five VZV replication when HEF cell were treated 24 h before the inoculation (pretreatment). Furthermore, at 2.4 mM it inactivated more than 99% of virus particle within 30 minutes at 37 ^{0}C.**(** Baba, M., & Shigeta, S. 1987**)** C- Glycyrrhizin completely inhibited HIV induced plaque formation in MT-4 cells at 0.6 mM, the 50% inhibitory dose being 0.15mM. It completely inhibited the cytopathic effect of HIV and the HIV-specific antigen expression in MT-4 cells at concentration of 0.3 and 0.6 mM, respectively. Furthermore, glycyrrhizin inhibited against cell formation of HIV infected Molt-4 clone No.8 cells. It had no direct effect on the reverse transcriptase of HIV. Its mechanism of anti-HIV action remains to be elucidated.**(** Ito, M *et al*.,1987**)** D- Glycyrrhizin, a triterpenoid glycoside and licorice from G.glabra and ammonium salt of glycyrrhizic acid (Sigma) were tested for antiviral activity on three strains of Japanese encephalitis virus (JEV), Nakayama, P-20778 and 821564 XY48. Purified glycyrrhizin (M.w.822.92) inhibited plaque formation in all the three strains of JEV at 500 µg/ml at 96h. Similar effect was observed at 1000µg/ml concentration with licorice and ammonium salt of glycyrrhizic acid. Thus, the indigenously purified glycyrrhizin appeared to be more potent antiviral agent then licorice and ammonium salt of glycyrrhizic acid (sigma) for JEV invitro.**(** Badam, L.1997**)** E- Hepatitis C caused by viral infection, may manifest as hepatic fibrosis, cirrhosis, mor porphyria. The hepatic damage is due to both the cytopathic effect of the virus and the inflammatory changes secondary to immune activation. The use of the botanical component glycyrrhizin was reviewed for its efficacy in treating chronic hepatitis and affecting liver damage.**(** Patrick L, Hepatitis C. 1999**)** F- Of all the compounds (ribavirin, 6-azauridine, pyrazofurin, mycophenolic acid, and glycyrrhizin) tested, glycrrhizin was the most active in inhibiting replication of the SARS-associated virus.**(** Cinatl J *et al*., 2003**)**	

5	Kalaunji	Nigella sativa	A- Antiviral effect of black seed oil from N. sativa was investigated using MCMV (RNA virus) as a model and oil was found to exhibit striking antiviral effect against this RNA virus.**(** Salem, M. L., & Hossain, M. S. 2000**)**	*Jali* (Detergent), *Munaffis-e-Balgham* (Expectorant), *Muqawwi-e-Meda* (Digestive tonic), *Qatil-e-Deedan-e-Ama* (Anthelmintic), *Mudirr-e-Haiz* (Emmenagogue), *Musakkin* (Relaxant), *Muhallil-e-Waram* (Anti-inflammatory).
6	Badranjboya	Melissa officinalis	A- The viricidal and antiviral effects of M. officinalis extracts with respect to herpes simplex virus type-1 (HSV-1) were carried out and one of the extracts was found to be active. The presence of caffeic, rosmarinic and ferulic acids in the active fraction was demonstrated by thin-layer chromatography and their role in the antiviral activity of M. officinalis was discussed.**(** Dimitrova, Z *et al*., 1993**)** B- The anti-HIV-1 activity of aromatic herbs in Labiatae was evaluated in invitro. In particular, the aqueous extract of Melissa officinalis, Mentha piperita var. crispa, Ocimum basilicum cv. cinnamon, Perilla frutescens var.crispa f. viridis, Prunella vulgaris subsp. Asiatica and Satureja montana showed potent anti-HIV-1 activity (with an ED of 16 µg/ml). The active components in the extract samples were found to be water soluble polar substances.**(** Yamasaki K *et al*., 1998**)**	*Mufarreh* (Exhilarant), *Muqawwi-e-Qalb* (Cardiac tonic), *Munzij-e-Sauda* (Concoctive of black bile), *Musaffi-e-Dam* (Blood purifier), *Mohallil-e-Waram* (Anti-inflammatory), *Musakkin* (Relaxant).
7	Kakda singhi	Rhus succedanea	A- Eleven bioflavonoids, isolated from R. succedanea and Garcinia multiflora, and their methyl ethers were evaluated for their anti-HIV-1 RT activity. Of these compounds robustaflavone and hinokiflavone demonstrated similar activity against HIV-1 reverse transcriptase (RT), with IC_{50} values of 65 µM. Amentoflavone, agathisflavone, morelloflavone, GB-1a and GB-2a were moderately active against HIV-1 RT, with IC_{50} values of 119µM,100 µM, 236 µM, and 170 µM, respectively. Morelloflavone also demonstrated significant antiviral agaist HIV-1 (strain LAV-1) phytohemagglutin- stumilated primary human peripheral blood mononuclear cells at EC_{50} value of 6.9µM and the selectivity index value of approximately 10.**(** Lin, Y. M *et al*., 1997**)** B- Biflavanoids such as amentoflavone, agsthisflavone, hinokiflavone, volkflavone, rhusflavonone,succedaneflavanone, all isolated from R. succedanea and G. multiflora, were evaluated for their antiviral activities. The inhibitory activities	*Mukhrij-wa-Munaffis-e-Balgham* (Expectorant), *Qabiz wa Habis* (Astringent and Haemostatic / styptic).

			against the number of viruses including respiratory viruses (Influenza A, Influenza B, respiratory syscytial, parainfluenza type-3, adenovirus type 5 and measles) and herpes viruses (HSV-1, HSV-2, HCMV, and VZV) were investigated. Robustflavone exhibited strong inhibitory effects against influenza A and Inflenza B with EC_{50} values of 2.0µg/ml and 0.2 µg/ml and selectivity index values (SI) of 16 and 454, respectively. Amentoflavone and agathisflavone exhibited moderate anti HSV-1 anti HSV-2 activities with EC50 values of 17.9 µg/ml (HSV-1) and 48.0 µg/ml (HSV-2) and SI values of >5.6 (HSV-1) and >2.1 (HSV-2).Robustaflavone also exhibited moderate anti HSV-1 anti-HSV-2 activities with EC50 values of 8.6µg/ml (HSV-1) and 8.5 µg/ml (HSV-2), and SI values of >11.6 (HSV-1) and >11.8 (HSV-2). Rhusflavanone demonstrated inhibitory activities against influenza B, measles, and HSV-2 viruses with SI values of 9.3, 8 and >6.4, respectively. Succedaneaflavanone exhibited inhibitory activities against influenza B virus and VZV with SI values of 15 and <3.0, respectively.**(** Lin YM *et al*.,1999**)**	
8	Darchini	Cinnamomum zeylanicum	A- Inhibitory effect of cinnamomi cortex, on the growth of infuenza A/PR/8 virus in vitro and in vivo. **(**Hayashi, K *et al*., 2007**)** B- Antioxidant activity of cinnamon (Cinnamomum zeylanicum, Breyne) extract. **(**Mancini-Filho, J *et al*., 1998**)** C- Immuno pharmacological studies of the aqueous extract of Cinnamomum cassia (CCAq).I.Anti-allergic action. **(**Nagai, H *et al*., 1982**)** D- A survey of some Indian medicinal plants for anti-human immunodeficiency virus (HIV) activity. **(**Premanathan, M *et al*., 2000**)**	*Mulattif* (Demulcent / Lenitive), *Jaazib* (Disiccant /Absorbent), *Mufateh* (De-obstruent), *Mufarreh* (Exhilarant), *Mudir-e-bol* (Diuretic), *Mudir-e-Haiz* (Emmenagogue).
9	Tukhm-e-Rehaan	Ocimum sanctum	A- Screening the antiviral activity of Indian medicinal plants against white spot syndrome virus in shrimp.**(** Balasubramanian, G *et al*., 2007**)** B- Ocimum sanctum- a preliminary study evaluating its immunoregulatory profile in albino rats.**(** Godhwani, S *et al*., 1988**)** C- The inhibitory effect of plant juice on the infectivity of top necrosis virus of pea (its leaves exhibited potent antiviral activity even at 1:1000 dilution). **(** Roy, A. N., & AN, R. (1979**)**	*Muqawwi-e-Qalb* (Cardiac tonic), *Mulattif* (Demulcent / Lenitive), *Munaffis-e-Balgam* (Expectorant), *Daf-e-Taafun* (Anti-septic).
10	Kulthi	Vigna unguiculata	A- Antifungal proteins, isolated from cowpea seeds, were found to be capable of inhibiting human immunodeficiency virus (HIV) reverse transcriptase and one of the glycohydrolases associated with HIV infection, alpha -glucosidase. The ability of	*Mukhrij-e-Hissat kulliya wa masaana* (Removal of stone from kidney and urinary bladdr), *Mudir-e-Bol* (Diuretic),

			the proteins in retarding mycelial growth of a variety of fungi was also demonstrated with alpha-antifungal protein more potent in most of the cases. The both antifungal proteins had low cell-free translation inhibitory activity.**(** Ye, X. Y. *et al*., 2000**)** B- A protein, designated unguilin of molecular weight of 18kDa, was isolated from seeds of the black-eyed pea (V. unguiculata). Its N-terminal sequence resembled that of cyclophilins and the cyclophilin-like antifungal protein from mung beans and it exerted an antifungal effect toward fungi including Coprinus comatus, Mycosphaerella arachidicola and botrytis cinereal. In addition, unguilin was capable of inhibiting human immunodeficiency virus-1 reverse transcriptase and the glycohydrolases alpha and beta glucosidases, which are involve in HIV infection.**(** Ye, X. Y. *et al*., 2001**)**	*Mudir-e-Haiz* (Emmenagogue).
11	Rajma	Phaseolus vulgaris	A- A homodimeric lectin of molecular weight of 67 kDa was isolated from red kidney beans. It exerted a suppressive effect on growth of F.oxysporum, C.comatus and R. solani. The lectin manifested inhibitory activity on human immunodeficiency virus-1 reverse transcriptase and alpha glucosidase. **(** Ye, X. Y. *et al*., 2001**)**	*Muhammir* (Rubefacient), *Mushtahi* (Appetizer), *Munaffis* (Expectorant).
12	Karela	Momordica charantia	A- A new inhibitor of human immunodeficiency virus (HIV) was isolated and purified to homogeneity from seeds and fruits of the M. charantia. This compound, MAP 30, a basic protein of about 30 kDa , exhibited dose-dependent inhibition of cell-free HIV-1 infection and replication.(Lee-Huang, S. *et al*., 1990) B- MAP30, an anti-HIV plant protein from bitter melon (M.charantia). is capable of acting against multiple stages of the viral life cycle, on acute infection as well as replication in chronically infected cells. In addition to antiviral action, MAP30 also possesses anti-tumour activity, topological inactivation of viral DNA, inhibitor of viral integrase and cell-free ribosome-inactivation activities.(Lee-Huang, S. *et al*., 1995) C- Lectins from M. charantia, Phaseolus vulgaris and Ricinus communis were able to inhibit HIV-1 reverse transcriptase, P.vulgaris lectin being the most poten one. Trypsin inhibitors from Phaseolus lunatus, Glycine max and alkaloids from Corydalis yanhusuo were able to inhibit HIV-1 reverse transcriptase, α-glucosidase, β-glucosidase and β-glucuronidase.(Wang, H. X., & Ng, T. B. 2001)	*Muhallil* (Resolvent), *Daf-e-Taafun* (Anti-septic).
13	Lehsun	Allium	A- The in vitro virucidal effect of fresh garlic	*Daf-e-Taffun* (Anti-

		sativum	extract, its polar fraction and the garlic constituent (Allicin, allyl methyl thiosulfinate, methyl allyl thiosulfinate, ajoene, alliin, deoxyalliin, diallyl disulfide and diallyl trisulfide) were observed against selected viruses including herpes simplex virus type 1, herpes simplex virus type 2, parainfluenza virus type 3, vaccinia virus, vesicular stomatitis virus and human rhinovirus type 2. From the result obtained it was suggested that garlic preparations having the highest levels of allicin and other thiosulfinates had the best virucidal effects.(Weber, N. D *et al*., 1992) B- The invitro antiviral activity of garlic extract on human cytomegalovirus (HCMV) was evaluated by tissue culture, plaque reduction and early antigen assay. A dose dependent inhibitory effect of garlic extract was evident when it was applied simultaneously with HCMV. But the effect was stronger when the monolayers were pretreated with garlic extract. The strongest antiviral effect of garlic extract was demonstrated when it was applied continuously. It is, therefore, recommended that clinical use of garlic extract against HCMV infection should be persistent and its prophylactic use is preferable in immunocompromised patients.(Guo, N. L. *et al*., 1993)	septic), *Muhallil-e-awraam* (Anti-inflammatory), *Jaali* (Detergent), *Akkal* (Corrosive), *Daf-e-Tasannuj* (Anti-spasmodic), *Muqwwi-e-asaab* (Nervine tonic).
14	Zanjabeel	Zingiber officinalis	A- The palnt juice exhibited potent antiviral activity even at 1:1000 dilutions. (Roy, A. N., & AN, R. 1979) B- The dried rhizomes of Indonesian ginger were investigated for anti-rhinoviral activity in the plaque reduction test. Bioactivity-guided search resulted in the isolation of several sesquiterpenes of which β-sesquiphellandrene was most active with an IC50 value of 0.44µM against rhinovirus 1 B in vitro.(Denyer, C. V. *et al*., 1994)	*Kasir-r-Riyah* (Carminative), *Hazim* (Digestive), *Munaffis-e-Balgam* (Expectorant), *Jali* (Detergent).
15	Haldi	Curcuma longa	A- Crucumin inhibit Zika and chikungunya virus infection by inhibiting cell binding.(Mounce, B. C. *et al*., 2017) B- A review on Antibacterial, Antiviral and Antifungal activity of Curcumin.(Zorofchian Moghadamtousi, S. *et al*., 2014) C- Evaluation of antiviral activities of Curcumin Derivatives against HSV-1 in Vero Cell Line.(Zandi, K. *et al*., 2010)	*Muhallil* (Resolvent), *Musakkin-e-Muqaami* (Local relaxant), *Muzaffif-e Qurooh* (Desiccative of ulcer), *Jali* (Detergent).

16	Honey	-	A- The In vitro anti-viral activity of Honey on Type-1 Herpes simplex virus.(Ghapanchi, J. w *et al*., 2011) B- Anti-inflenza viral effects of Honey in Vitro: Potent High Activity of Manuka Honey.(Watanabe, K. *et al*., 2014) C- Kanuka honey versus acyclovir for the topical treatment of herpes simplex labialis: a randomized controlled trial. (Semprini, A. *et al*., 2019)	*Mulattif* (Demulcent / Lenitive), *Mudammil* (Cicatrizant), *Muhallil* (Resolvent), *Muqawwi-e-aam* (General body tonic).

METHODOLOGY

The record used to get evidence from different research journals, articles from Google scholar, PubMed, Science direct and Scopus index. For the search of current and classical unani literature research. We suggest SOP's for therapies are as fallows.

Method of preparation of decoction: All the drugs in Table-02 of decoction are to be soaked in water (1:5) at room temperature in evening for eight hours and boiled in the morning at 100 degree Celsius for one minute and decoction is filtered (through sixty number sieve) and to be given with 5 ml of pure honey TDS to QID depending on the severity of disease, severe patients can drink as hot beverage many times a day, as the drug plants are having no reported adverse drug reactions.

Methods of preparation of inhalation: All the drugs in Table-03 of inhalation are put in hot boiled water and used for steam inhalation.

Methods of preparation of diet therapy: Prepared as food in home.

DISCUSSION

Scientific community is only accepting evidence-based medicine, that is why we are justifying the role of Unani medicine on scientific basis. The drug plants we have mentioned are protease inhibitors or anti-retroviral which have been proven in invitro studies.

As on date we know COVID-19 is affecting only humans, rarely to animals. Plants are naturally immune to novel corona virus. In past ancient physicians were advising goats milk in tuberculosis with the concept that goats are naturally immune to TB. Similarly, when we say plants are naturally immune to corona viruses hence plants may have the role in the treatment of COVID 19.

We have studied about seventy-five medicinal plants with anti-retroviral effectivity, among them thirty-five are of Indian origin, twenty-three are mentioned in Unani classical literature and we have selected only nine (for decoction), six (for inhalation) and eight (for in addition to diet) because of reasons as under;

a) They are having moderate to strong anti-retroviral effects
b) In traditional classical medicine these herbs are also used in different kinds of respiratory illnesses, Influenza, sore throat and influenza like illnesses.
c) The formulation which is honey based is ideal for older people who are prone to infections.
d) It provides vitamins, minerals, trace elements and different types of immunoglobulins which are responsible for the development of our body resistance in different infectious diseases.
e) The formulation is made full of taste, we did not select bitter drugs to the formulation because many of patients can't accept noxious and bitter drugs.
f) The drug plants are easily available almost everywhere in India.
g) If AYUSH ministry takes this proposal it will not only serve the human life in India but also it will be good source of income to farmer, drug company and to the nation.
h) The herbal drugs mentioned above are having no toxicity or ADR because such drugs are always used in traditional medicine from thousands of years.

Presently certain experimental drugs are given through out the world for COVID-19 without evidence with potential side effects including HCQ, Azithromycin and ART (Lopinavir and Ritonavir) which may cause even death of an individual.

So, need of the hour is to re-search new things to combat COVID-19 without adverse drug reactions.

CONCLUSION

We need to check pre-clinical and clinical trials without wastingS time for the drugs mentioned above so that Indian systems of medicine can make a breakthrough in the management of COVID 19.

If such a study is done on scientific parameters then our country India may show a ray of hope to rest of World.

Acknowledgement

Author dully acknowledge to Ministry of AYUSH, GoI, New Delhi.

Conflict of interest
No any conflict of interest

REFERENCE

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