

Recent Advances in Ayurveda in India with Reference to COVID-19 Pandemic

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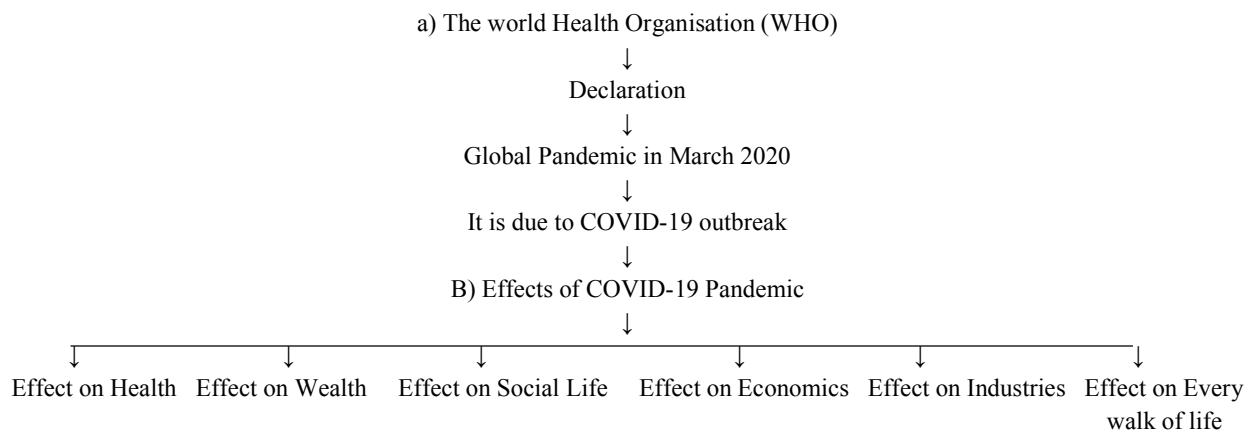
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Abstract: In India, Kerala State Government stated 1206 AYUSH Raksha Clinics and associated task forces across the state in April 2020. It is to apply Ayurvedic Preventive, Therapeutic and Convalescent care strategies for the COVID-19 pandemic. Sayed Ahmad et. al. (2021) worked on medicinal plants and formulations and their potential against COVID-19 preclinical and clinical research. According to them, the AYUSH recommended formulations of medicinal plants routinely used by Indian population, which can be tested against COVID-19. AYUSH emphasised on Indian medicinal plants reported for antiviral, immune modulatory and anti-allergic/anti-inflammatory activities. AYUSH also categorised for prioritization in research on the basis of earlier reports. Sayeed Ahmad et. Al. (2021) further suggested that AYUSH has promising formulations with Indian medicinal plants to be investigated on a priority basis to solve the present pandemic situation. According to Unnikrishnan et. Al. (2020), approach of Ayurveda in pandemic situation like COVID-19 will reduce long time for clinical trials of allopathic drugs. Ayurveda and its derived drugs in COVID-19 resolved the long time for pandemic remedies. They also said that efforts should be taken to bring the whole systems approach into research methodologies to effectively generate evidence supporting Ayurveda interventions for COVID-19. Rakesh Kotecha (2021) state that use of immunity promoting interventions form the ancient traditional systems of medicine involving Ayurveda, Yoga and Naturopathy, Unani, Siddha, Sowa Rigpa, and Homeopathy (AYUSH) and several home remedies based on traditional knowledge played important role in lowering rates of mobility and mortality in India during COVID-19 pandemic Situation. Harish Singh(2022) provided a pragmatic plan for Ayurveda intervention in COVID-19 pandemic situation. He said that it should be implemented immediately it will be helpful to learn, to generate evidence of application of Ayurvedic in COVID-19 pandemics..

Keywords: COVID-19; SARS-Co.V-2; TCM, Ayurveda, Pandemic, AYUSH, MoA; WHO, ICMR, CSIR

I. INTRODUCTION

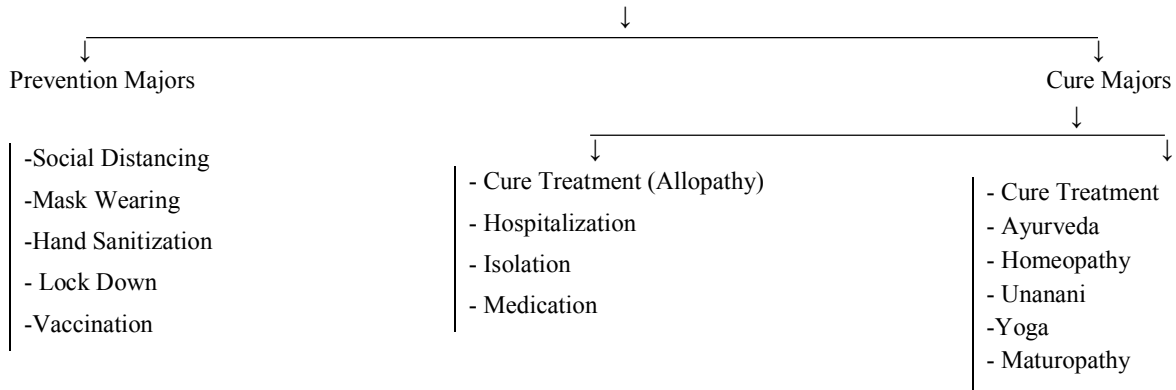
1.1 About the COVID -19 Pandemic





1.2 Majors to Control the COVID-19 Pandemic in India

Majors to Control the COVID-19 Pandemic in India

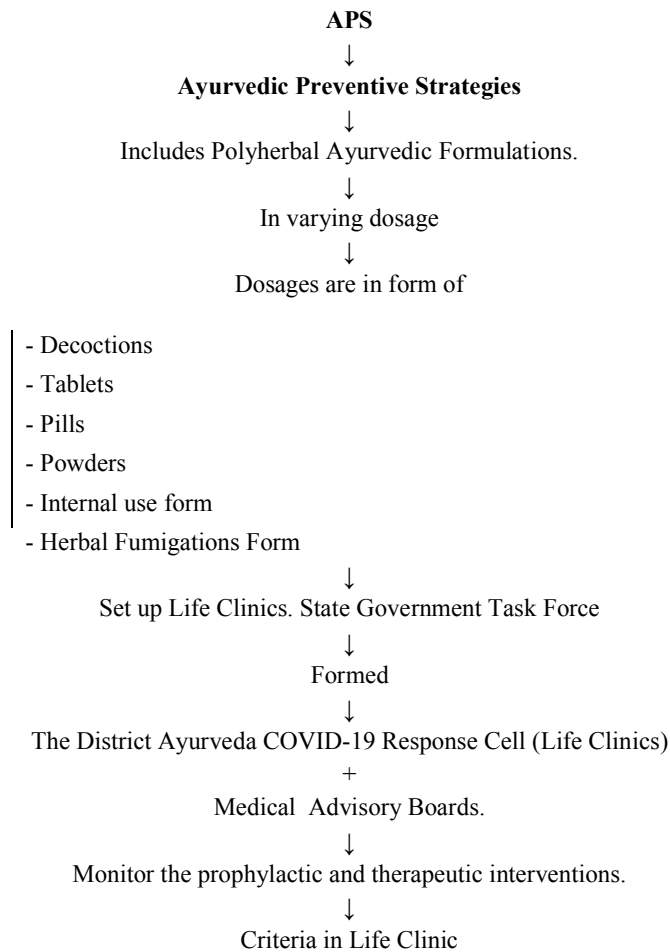


1.3 Recent Advances in Ayurveda in India with Reference to COVID-19 Pandemic

A. Recent Advances in Ayurveda in Kerala With reference to COVID-19 Pandemic

Kerala Implemented Ayurvedic Preventive Strategies for COVID-19. It is Named as Amritham.

Ayurvedic Preventive Strategies is abbreviated as APS.





- Provide Ayurvedic Medicines to Quarantine Patient	- To obtain informed consent for Ayurvedic Medicines
- APS Medicines to quarantine Patient	- To provide dietary advice
- No other Medicines to quarantine patient	- To provide tele follow-up

1.4 Results of Amritham in Kerala

In Kerala, The AYUSH department established about 1,200 life clinics under Amritham. From 21 May 2020. TO 8TH July 2020, 101218 individuals quarantined under Amritham. Out of 101218, 347 individuals tested positive for COVID-19 infection at time of their quarantine. All those also recovered totally without any serious complications no one required intensive care or ventilator support. Authentic government sources concluded that 1.61% of the general quarantined population tested +ve for COVID-19 during pandemic situation.

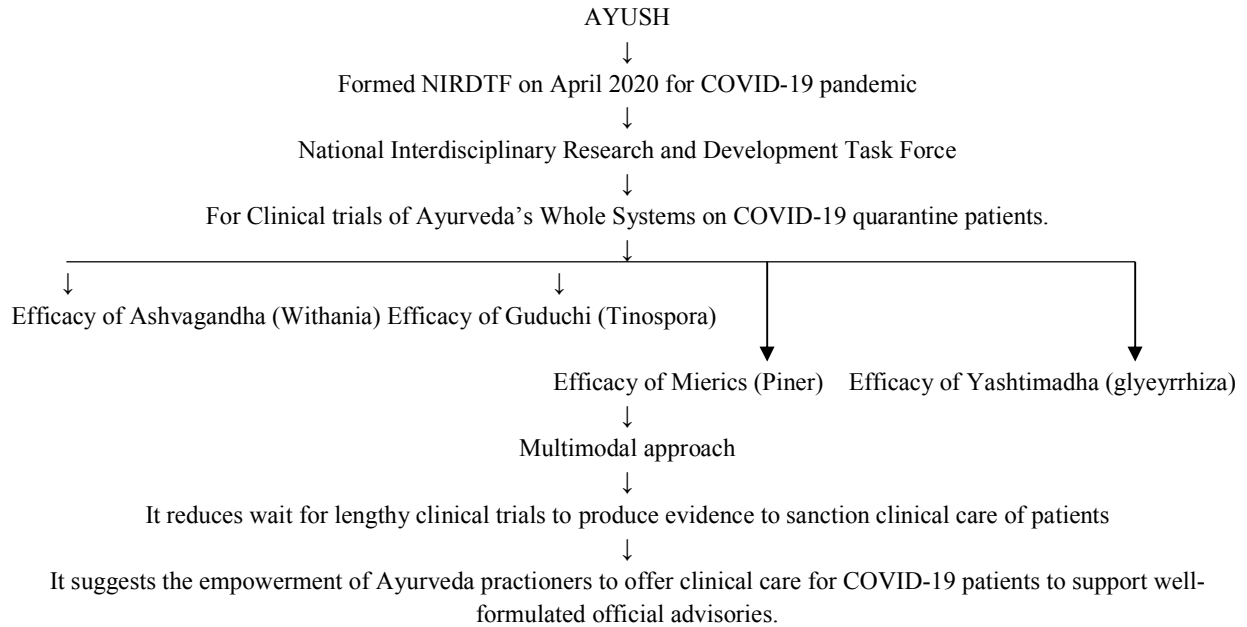
Recent Advances in Ayurveda with reference to COVID-19 pandemic by Sayeed Ahmad et.al. In relation to Indian Medicinal plants and formulations against COVID-19 pandemics.

Ministry of AYUSH (Government of India) provided recommendations as per given table, it is on basis of practical knowledge and practical outcomes of data.

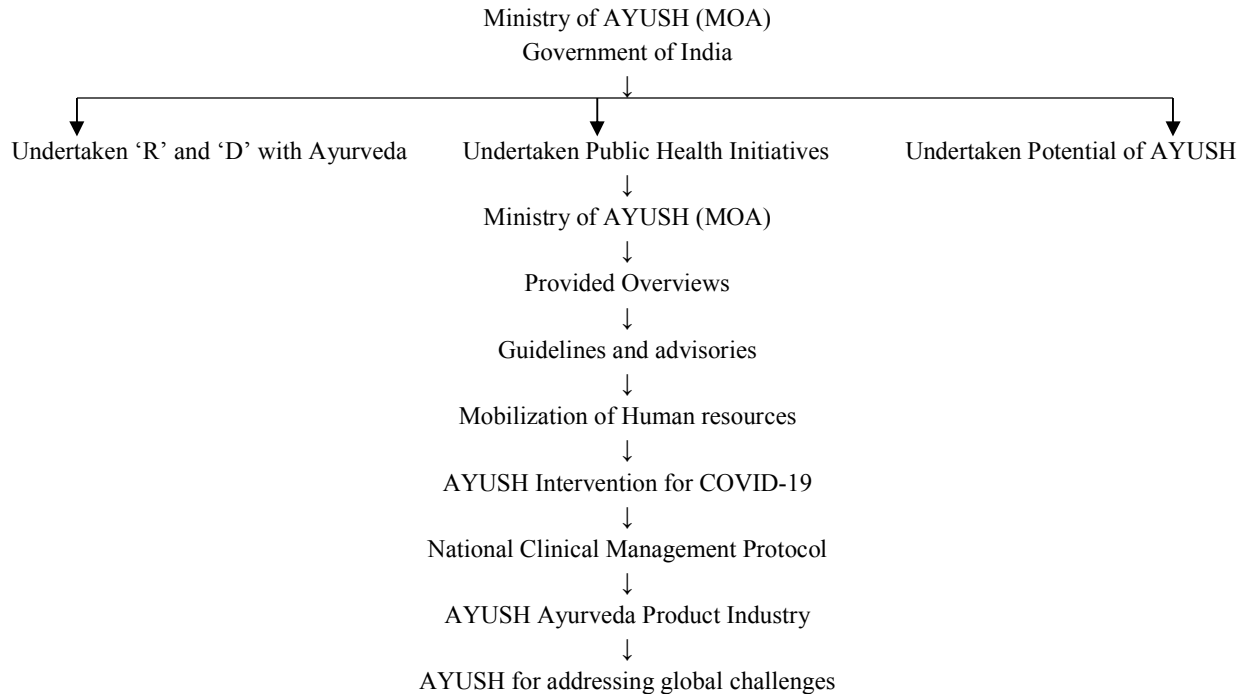
Name of the Formulation	Composition	Proof of activity related to COVID-19	References
Anuthalia	Leptaderia Reticulate (Retz) Wight and Am. Root/Stem bank	AC	Pravansha et. al.(2012), Mohanty et. al. (2015)
	CedrusDeodra (Roxb. Ex D. Don) G.Don (Stem)	B	Raghvendra et.al. (2016)
	Ocimum Sanctum L (Leaves)	A,B,C	Goel. et.al. (2010), Ghoke et. al.(2018), Soni K. et.al(2015)
	Asparagus racemogus wild (root)	A	Gautam et.al. (2009)
Agasthaya Hareetaki	PremnaMucrontaRoxb (root/stem/bark)	AC	Danta and Janta (2017)
	Piper Chaba Hunter (Fruit)	C	Sheertawong et. al. (2012)
	HordeumVulgare L. (Seed)	C	Gul. et.al. (2014)
	Piper longum L. (Root)	A,B,C	Tripathi et. al.(1999), Jiang et.al. Kaushik, et. al. (2012)
AYUSH 64	AistoniaScholaris(L) R. Br.(Bark)	A,B,C	Lwo et. al(200), Antony et. al.(2014), Zahao et. al. (2017)
	CaesaipirieaCristia L (Seed Pulp)	C	Ramesh et.al. (2014)
AYUSH Kwath	Ocimum Sanctum L. (Leaves)	ABC	Goel. et.al. (2010), Ghoke et. al.(2018), Soni K. et.al(2015)
	Piper Nigrum L. (Fruit)	ABC	Majdaiewieh and carr (2010), Mair et. al.(2016), Tasiem et.al. (2014)
	ZIngberoffcinateRascoe (rhizome)	ABC	Zhou et. al. (2006), Chang et. al. (2013), khan et. al. (2015)



1.5 Recent Advances in Ayurveda Whole Systems with Reference to COVID-19 Pandemics



1.6 Recent Advances in Initiatives by Ministry of AYUSH to Challenge the COVID-19 Pandemic Situation



1.7 Recent Advances in Ayurveda with Pragmatic Plan for Ayurveda Intervention in COVID-19 Pandemic.

Sr. No	Category of People	Proposed Intervention
1	Unexposed asymptomatic group	Common health keeping approaches of Ayurveda including healthy diet, healthy life-style, adequate sleep, physical activity, good conduct, care for retainable and non-retainable urges, and avoidance of disease causing factors (excessive cold and exposure to pollutants). In addition, <i>Chyavanprasha, Brahma Rasayana, AmritBhallataka, Sanjeevanivati, Swarnaprashan.</i>
2	Exposed asymptomatic (Quarantined)	<i>Sanjeevanivati, Chitrakatdivati, Chyavanprasha, Brahma Rasayana,</i> and decoction of a combination of herbs, <i>Tinosporacordifolia, Zingiberofficinale, Curcuma longa, Ocimumsanctum, Glycyrrhizaglabra, Adhatodavasica, Andrographispaniculata, Swertiachirata, Moringaoleifera, Triphala and Trikatu.</i>
3	With mild COVID-19 symptoms	<i>Pippalirasayan, Go JihvadiQuath, KantakariAvaleha, Chitrakadivati, Vyaghriharitaki, Dashamulkwath, Sitopaladi, Talishadi, and Yashtimadhu etc.</i>
4	With moderate to severe COVID-19 symptoms	<i>Pippalirasayan, Laghu Vasant Malati, Sanjeevanivati, TribhuvanKeerti rasa, BrihataVataChintamni rasa, Mrityunjaya rasa, Siddha Makardhvaja etc.</i>

II. CONCLUSION

In India, Kerala State Government stated 1206 AYUSH Raksha Clinics and associated task forces across the state in April 2020. It is to apply Ayurvedic Preventive, Therapeutic and Convalescent care strategies for the COVID-19 pandemic.

Sayed Ahmad et. al. (2021) worked on medicinal plants and formulations and their potential against COVID-19 preclinical and clinical research. According to them, the AYUSH recommended formulations of medicinal plants routinely used by Indian population, which can be tested against COVID-19.

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According to Unnikrishnanet. Al. (2020), approach of Ayurveda in pandemic situation like COVID-19 will reduce long time for clinical trials of allopathic drugs. Ayurveda and its derived drugs in COVID-19 resolved the long time for pandemic remedies. They also said that efforts should be taken to bring the whole systems approach into research methodologies to effectively generate evidence supporting Ayurveda interventions for COVID-19.

Rakesh Kotecha (2021) state that use of immunity promoting interventions form the ancient traditional systems of medicine involving Ayurveda, Yoga and Naturopathy, Unani, Siddha, Sowa Rigpa, and Homeopathy (AYUSH) and several home remedies based on traditional knowledge played important role in lowering rates of mobility and mortality in India during COVID-19 pandemic Situation.

Harish Singh(2022) provided a pragmatic plan for Ayurveda intervention in COVID-19 pandemic situation. He said that it should be implemented immediately it will be helpful to learn, to generate evidence of application of Ayurvedic in COVID-19 pandemics.

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