ABSTRACT: Impacts of diseases can be assessed through various changes in society after an insurgence of new disease. It remarkably influences the existing system and can be interpreted as positive, negative or neutral based on the sensible variables. Although negative impacts are noted in terms of lock down of Ayurveda hospitals, clinics, Ksharasutra clinics (Para-surgical practice for anorectal diseases) and panchakarma centers. There is a significant drop of OPD strength due to lock down and shut down process. IPD services of most of Ayurveda hospital is closed down or running with very less patients. There is a mass drop out/partial drop out of research subjects from ongoing clinical trials and new patient’s recruitment is not possible for close down of clinical laboratories. But positive impact is more as it creates awareness to opt Ayurveda kwatha, nasya, pranayama and yogasana to prevent COVID-19 which reached every house of India. More funds are diverted for clinical trials of Ayurveda formulations in COVID-19, purchase of sanitizer, masks, PPE kits etc and awareness. AYUSH Sanjeevani app is much successful procedure to monitor the AYUSH advocacy in COVID-19. Ayurveda Kits for corona have been distributed in venerable groups and front-line warriors by different Ayurveda Colleges and Institutes. Many Institutes conducted Webinars on Practice of Ayurveda Immuno-booster in COVID-19 from unlock-3 onwards to aware the practicing doctors. Controversies raised for evidence of the efficacy and safety of Ayurveda formulations in COVID-19 but preliminary evidences showed Ayurveda formulations like AYUSH-64 and others showed better clinical output compared to conventional standard therapy in clinical trials. It was concluded that Positive impact is more than the negative Impact on Ayurveda practice and research in the COVID-19 pandemic situation.

Key words- Positive impact, Negative impact, COVID-19, AYUSH Sanjeevani app, AYUSH advisories
INTRODUCTION

Impact is the remarkable influences on the existing system by forced invade of a new think as like-pandemic disease. This impact can be interpreted as positive, negative or neutral based on the sensible variables. It is an essential exercise to assess impact of serious illness in pandemic form for its negative and positive influence on the economy, society, public policy, preventive, promotive and curative health, quality of life, environment and to allocate research project for maximum benefit with minimum waste of funds and manpower. Health impact assessment (HIA) is a combination of procedures, methods and tools used to evaluate the potential health effects of a policy, programmer or project. Using qualitative, quantitative and participatory techniques, HIA aims to produce recommendations that will help decision-makers and other stakeholders make choices about alternatives and improvements to prevent disease/injury and to actively promote health. COVID-19 pandemic has a significant remark in many areas which are reflected in Wikipedia. But its impact on Ayurveda practice and research is not found either in Wikipedia or another search engine in internet platform. Therefore, an attempt was taken to assess the impact of COVID-19 pandemic in Ayurveda practice & Research. Ayurveda is a live traditional system of health care with an unbreakable practice since 3000 years. Ayurveda gained importance in its own country where it was originated after the establishment of Department of AYUSH in 2003. Then National Rural health mission (NRHM) includes Ayurveda (one of the components
of AYUSH) as alternative therapy option to integrate with western medicine to serve the people of India in better way in 2005. Ayurveda health care is more focused after the establishment of AYUSH ministry in 2014. Central council of Research in Ayurveda Sciences (CCRAS) has also intensified the specific research-based programme and project and renamed its institute as specific system based to create more data on practice of Ayurveda & initiate research in 2016. Herbal medicine is used by 75–80% of the world population, mainly in developing countries for primary health care. But only 6.9% of Indian population favored AYUSH system of medicine as evident in NSSO survey in 2014. Many committees recommended that more awareness and research are required to Popularize the system. Many patients prefer Ayurveda after dissatisfaction or frustration with contemporary medicine, low cost of Ayurveda medicine in comparison to allopath, easy access to Ayurveda physician, last option and less side effect. More over some patients choose Ayurveda primarily based on their personal experience and strong recommendation of other people. The Ayurveda diagnostic process is subjective and patient oriented, some of diagnostic tools such as Prakruti (Constitution) assessment and Nadi Parikshya (Pulse diagnosis) are also patient centric. The treatment always personalized and classified as Sodhana (Purificatory) and Samana (Palliative). The Sodhana therapy is also called as Panchakarma therapy or detox therapy where snehana (oleation) and swedana (Sweating) are preparatory therapy which need personal contact of panchakarma technician and Ayurveda physician. Ksharasutra, leech therapy and uttaravasti are para surgical procedures mostly practice in Ayurveda hospitals. The researches in Ayurveda are academic research in post graduate centers and special research in Research centers. Some of the academia and Institutes have been conducting clinical trial, animal experiments and other researches like Clinical epidemiology, Pharmaco epidemiology etc.

MATERIALS AND METHODS
The Impact is measured by observing different activities of Ayurveda Institutes and following leading newspapers, Journals and wave site.

Impact of COVID-19 Pandemic
COVID-19 Pandemic impact on almost all sectors of India and luck down impact on supply chain, decrease government income,
collapse tourism, reduce consumer activities and raised unemployment. Government has announced variety measures and release extra budget to handle the impact from food security to health care sector. COVID-19 Pandemic has political, educational, religious (closed down of temple, churches, Masjids), psychological impacts and found increase of domestic violence. The positive impact of covid-19 on environment is that 25% reduction of carbon emission and 50% reduction of nitrogen oxide emission which save COPD patients from execration\textsuperscript{10}. If health care sector is considered, then various clinical guidelines are issued for management of COVID-19 patients as well as normal patients. Research Councils under the Ministry of AYUSH, Government of India have also issued advisory based on the Indian traditional medicine practices i.e. Ayurveda, Homeopathy and Unani before the outbreak in India\textsuperscript{11}. A consensus statement in Ayurveda management and prevention was developed for COVID-19\textsuperscript{12}.

**Impact on Ayurveda Practice & Research** – In the first & 2\textsuperscript{nd} phase of lockdown, many Ayurveda hospital discharged their IPD patients. The private Panchakarma hospitals and message centers are completely closed down which are partial depend on tourism\textsuperscript{13}. All parasurgical procedures and invasive panchakarma procedure are stopped due to outbreak of COVID-19. In this stage more asymptomatic cases and carriers are found, which would amplify the chances of infection, therefore Ayurveda doctors managed the research and general cases by wearing surgical mask, hand wash by sanitizers. After that PPE kit was provided to some doctors those are doing COVID duty\textsuperscript{14}. Ayurveda doctors postponed the wellness therapy and medication to non-urgent cases. IPD services of most of Ayurveda hospital is closed down from Lock down -1 or running with a smaller number of patients. In the Unlock process, some of the Ayurveda hospital and Medical colleges converted to COVID hospital by its State government. Some of AYUSH doctors sacrificed their life also.
Table No-1. Milestone of lock and unlock process in COVID-19 pandemic and its impact in Ayurveda Practice and Research

<table>
<thead>
<tr>
<th>Time line</th>
<th>Activities</th>
<th>Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lock down 1 (25th March to 14th April (21 days)</td>
<td>Public Transport system stopped, strict on mobilities of person. Strict enforcement of law and order.</td>
<td>Most hospital’s IPD &amp; OPD services closed. Only service provided for urgent case. Mask and sanitizer supplied to Covid warrior. OPD strength less, subject dropped out in clinical trial.</td>
</tr>
<tr>
<td>Lock down -2 15th April to 3rd May (19 days)</td>
<td>Some relaxation for patients, doctors</td>
<td>Ayurveda hospital converted to COVID hospital. Doctors worked with Mask &amp; sanitizer</td>
</tr>
<tr>
<td>Lock down -3 4th May to 17 may (14 days)</td>
<td>Some relaxation for patients, doctors</td>
<td>OPD of Ayurveda hospital with Social distance. Doctors paramedics are wearing PPE kit</td>
</tr>
<tr>
<td>Lock down -4 18May to 31st May</td>
<td>Some relaxation</td>
<td>Promotion of Sanjeevani app with PPE kit</td>
</tr>
<tr>
<td>Un lock 1 1st June to 30th June</td>
<td>Some relaxation, social distancing, hand wash, Mask use is compulsory with weekly two days shut down</td>
<td>Clinical laboratory open, patient recruitment in some project started, and promotion of AYUSH sanjeevani app.</td>
</tr>
<tr>
<td>Un lock 2 1st July to 31st July</td>
<td>Social distancing, hand wash, Mask use is compulsory with weekly two days shut down</td>
<td>Promotion of AYUSH Sanjeevani app, Tele Medicine Practice in some Institutes</td>
</tr>
<tr>
<td>Un lock 3 1st August to 31st Aug</td>
<td>Social distancing, hand wash, Mask use is compulsory with weekly two days shut down</td>
<td>Webinar of Ayurveda Immuno boosters, Telemedicine practice</td>
</tr>
<tr>
<td>Unlock 4 1st Sep to 30th Sep</td>
<td>Full relaxation on mobilities with Mask, Public transport services are reappeared.</td>
<td>Webinar of Ayurveda Immuno boosters, Telemedicine, Corona Kit distribution to Vulnerable group</td>
</tr>
<tr>
<td>Unlock -5 1st Oct-31st Oct</td>
<td>Full relaxation on mobilities with Mask, Public transport services are reappeared</td>
<td>OPD functioning with Mask use, social distancing, Tele medicine stopped in some Institute, Corona Kit distribution to Vulnerable group, IPD services of some Institute reopened, Press conference and news in press and electronic media.</td>
</tr>
</tbody>
</table>
The impact on Ayurveda Research is also noted in many centers, the trial subject cannot continue the clinical trials due to lock down and shut down principle of government and unavailable of public transport. There is a mass drop out/partial drop out of subjects from ongoing clinical trials and new patient’s recruitment is not possible for close down of clinical laboratories. There is more ongoing research on Immuno boosting properties and preclinical studies\textsuperscript{16}. In the midst of the Pandemic, MoHW, in collaboration with Niti Aayog, released Telemedicine Practice Guidelines enabling Registered Medical Practitioners to provide healthcare in remote settings using telemedicine. These guidelines are recognized by some of the Ayurveda hospitals. The patient’s attendance dropped up to 80\% of most of Ayurveda hospitals. The clinical trials cases dropped out the trial due to lock down process. Whereas new trials on COVID-19 was encouraged, but clearance from state government to conduct trial on covid-19 was a top job in many states. More positive impacts were generated when Prime Minister Narendra Modi endorsed traditional ways to boost the immune system, directing people to follow the guidelines issued by the AYUSH ministry to avoid contracting Covid-19. The prime minister also asked those practicing traditional medicines to utilize the platform of tele-medicine and reach out to the people to generate awareness in the fight against the Covid-19 pandemic. Phyto therapeutic agents containing higher concentration of sesquiterpene, poly phenols and flavonoids have inhibited the production of inflammatory cytokines and prostaglandin which are more produced in COVID-19. Yastimadhu, Gilay and Aswagandha has equal effect on cough as codeine. The Anu taila nasya has special power to prevent COVID-19. More than 70\% of Indian population has been using Ayurveda Kwatha (Decoction), Haldi milk, Use Chaubanprash and practice Yogasana and pranayama for prevention of COVID-19. More clinical research studies on Ayurveda interventions have been undertaken as prophylaxis and as an add-on to standard care to COVID 19. A Collaborative clinical study was proposed as a joint initiative of Ministry of AYUSH, Ministry of Health and Family Welfare (MoHFW) and the Ministry of Science & Technology through Council of Scientific & Industrial Research (CSIR) with technical support of ICMR. The Interdisciplinary AYUSH R&D Task Force has formulated
and designed clinical research protocols for prophylactic studies and add-on interventions in COVID-19 positive cases through a thorough review and consultative process of experts of high repute from different organizations across the country for studying four different interventions viz. Ashwagandha, Yashtimadhu, Guduchi +Pippali and a polyherbal formulation (AYUSH-64) developed by CCRAS. Ayush Sanjivani application-based study for impact assessment of acceptance and usage of AYUSH advisories in its role in the prevention of COVID 19 is initiated in all Ayurveda Institutes and hospitals. The Ministry of AYUSH has developed Ayush sanjeevani mobile app, for generating data of large population with a target of 5 million people\(^{16}\). The Researchers are worked hard to reach to expected outcomes include to generate data on acceptance and usage of AYUSH advocacies and measures among the population and its impact on the prevention of COVID-19. Various Webinar has been conducted by different Ayurveda medical colleges and research Institutes to sensitize the Ayurveda doctors regarding the usefulness of Rasayana drugs (Immuno boosters) in COVID-19 situation. The corona kits are distributed to venerable groups by many Ayurveda colleges and Institutes. The time line with different impact is presented in Table no1.

**DISCUSSION**

Although negative impacts are more noted in terms of lock down of Ayurveda hospitals and Ksharasutra and panchakarma centers. There is a significant drop of OPD strength due to lock down and shut down process. As Ayurveda diagnostic process is subjective and patient oriented, some of diagnostic tools such as Prakruti (Constitution) assessment and Nadi Parikshya (Pulse diagnosis) are need direct patient contact and treatments are also patient centric so more drop in patient’s ratio are observed in Ayurveda Hospitals. But positive impact is more as it create awareness to opt Ayurveda kwatha, nasya , pranayama and yogasana to prevent COVID-19. Ayurveda reached every house of Indian.

**CONCLUSION**

Positive impact is more than the negative Impact on Ayurveda practice and research in the COVID-19 pandemic situation.

**Acknowledgement:**- Nil  
**Financial Assistant:**- Nil  
**Conflict of interest :-** Nil
REFERENCES


2. Shroff FM. What is ayurvedic health care and how is it applicable to the Modern Day. J Nutr Hum Health. 2017;1(2):17-29


6. Samal, Janmejaya; Dehury, Ranjit Kumar (18 October 2018). "Utilization, preference, perception and characteristics of people adopting traditional and AYUSH systems of medicine in India: a systematic review". *Journal of Complementary and Integrative Medicine*. 16 (2)


