

RIS Research and Information System for Developing Countries विकासशील देशों की अनुसंधान एवं सूचना प्रणाली

SDG-3 and COVID-19 Mainstreaming Traditional Medicine

Introduction

The new Corona Virus Disease (COVID-19) pandemic has taken the world in its tight grip. The human race is facing an unprecedented challenge that has a huge impact on our social and economic life. While the fight against COVID-19 is on, it is important not to lose track of the goals that we have set for humanity for sustainable development in the coming decades. In fact, it is all the more essential now to work at a global scale in our endeavour towards moving to a better and sustainable future, which is in sync with the nature.

In the year 2015, a United Nations (UN) Declaration had set the 17 Sustainable Development Goals (SDGs) designed to be a "blueprint to achieve better and more sustainable future for all" by the year 2030, but the five years since then have thrown up many challenges. In 2019, the UN Secretary-General Antonio Guterres observed: "It is abundantly clear that a much deeper, faster and more ambitious response is needed to unleash the social and economic transformation needed to achieve our (SDG) 2030 goals".1 The challenge has now increased manifold. The World Health Organisation (WHO) Director-General Dr Tedros Adhanom Ghebreyesus has admitted that, "... the rate of progress is slow to meet Sustainable Development Goals and will be further thrown off track by the COVID-19".2 This

statement is particularly true for SDG 3: Good Health and Well-being for All.

COVID-19 has direct and indirect impact on the health and well-being of the population. The direct impact is on COVID-19 patients in the form of health hazard that it poses. But there is an indirect impact that comes in the form of neglect of other diseases that healthcare systems are not able to cater to because of the complete focus on the new viral infection. There have been news from all over the world that other infectious diseases (IDs) like Dengue, Malaria, and Tuberculosis are spreading owing to lack of medical care because health care facilities and health workers are now mostly deployed for COVID-19 cases only. Moreover, COVID-19 has also impacted the incidence of noncommunicable diseases (NCDs), particularly cardiovascular and mental health problems, since patients are not able to seek medical help because of the general lockdown. But these problems will resurface later and that too with greater intensity. With only ten years left to achieve the SDG 3 goal, the magnitude of the challenge facing us has risen exponentially. It is, therefore, important to think with ingenuity about innovative methods for achieving the goal within the stipulated time frame. Keeping this perspective this Policy Brief specifically focuses on the option of mainstreaming Traditional Medicine (TM) in healthcare.

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SDG 3 is about ensuring "healthy lives and promoting well-being for all at all ages"3. It has 13 targets. These targets range from reducing premature mortality rates, such as pregnancyrelated nutrition deficiency; to reducing environmental pollution; ensuring universal access to sexual and reproductive health-care services, including family planning; and achieving universal health coverage and ensuring financial risk protection; access to quality essential healthcare services; and access to safe, effective, quality and affordable essential medicines and vaccines for all. A major target of the SDG 3 is to achieve Universal Health Coverage (UHC) through affordable access to quality health care services and medicines that lead to wellbeing of all individuals across the globe. Each such target has several indicators to measure progress towards achieving it. Total indicators under SDG 3, as of now, are 27.

The SDG progress report 2019 painted a mixed picture of the developments that have taken place under SDG 3 so far. The progress has been highly uneven with less developed countries lagging behind in terms of communicable diseases (CDs) as well as maternal health (UN SDG Report, 2019).

The pattern differed in the developed countries, where there has been a decline in incidence of CDs, but lifestyle related diseases especially cardiovascular diseases and mental health problems were on the rise. These trends were in correlation with the extent of UHC in these countries. Figure 1 presents the distribution of UHC index during 2017 across the globe. It shows that Sub-Saharan Africa and South Asia have very low UHC index whereas, countries of North America and West Europe have very high index score. These were also the countries that had seen a significant decline in the incidence of CDs until last year. Consequently, till 2019, both these developed regions were focussing more on tackling the NCDs which were poised as the major challenge in front of them.

In 2020, the situation changed drastically, with the sudden emergence of the new viral infection that quickly turned into a pandemic. The countries that have been claiming best UHC scores (See Figure 1), especially in Europe and North America, have been hit the hardest by the new pandemic. In comparison, the two most populated countries in the world, China and India, which also have large Traditional Medicine systems, have done much better in controlling the contagion and keeping mortality in check (See Table 1).

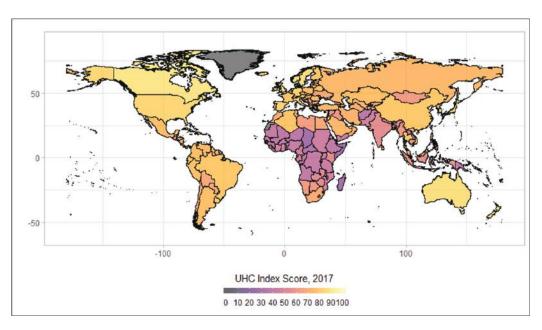


Figure 1: Universal Health Coverage Services Index Score of Different Countries, 2017

Source: Authors illustration of data from the World Bank databank.

This raises certain questions about the adequacy of the current model of healthcare based entirely on modern medicine to meet with new disease challenges. As of now, no vaccine or medicine has proved effective against the virus, which experts fear is going to be with humanity for long and may remain endemic. Further, even if the COVID-19 epidemic is taken care of, on a future date the increased incidences of mental health problems and other diseases that were neglected during the pandemic time are likely throw up yet another unparalleled healthcare challenge in front of the countries. All this is likely to impact adversely the achievement of SDG 3 as envisaged earlier. This necessitates a more open approach to health care than in the past. The TM systems around the world have a compelling case to be part of the efforts to achieve the targets of SDG 3 and UHC.

Traditional Medicine and Universal Health Care

Before we build the case for TM as an important tool to achieve the SDG 3 in the post-COVID-19 world, it is important that we understand properly the concepts of 'health', 'well-being' and 'Traditional Medicine'. Health does not merely mean the absence of disease as is commonly believed. As per the preamble to the Constitution of WHO signed on 22 July 1946 by the representatives of 61 States (Official Records of WHO, No. 2, p. 100) and enforced on 7 April 1948, health is a state of complete physical, mental and social wellbeing. This definition has not been amended since 1948. Similarly, the concept of 'well-being' enshrined in the SDG 3 espouses the principle of integrated

development as it includes nutrition, physical and mental health of individual and community, and sustainable environment and climate - all factors contributing to nutrition, health and well-being. The traditional life styles of the people of India had already recognised this. Nutrition is essential for health and is to be derived from the food obtained from nature or produced by agriculture. This befits the TM approaches to health and well-being as holistic and not something limited to morbidities or pathogenesis, as epitomised in the word 'salutogenesis' coined by Aaron Antonovsky5, as well as in the Indian Systems of Medicine (ISMs) concept that balance of physical, mental, spiritual, social and ecological dimensions is good health. The term 'Traditional Medicine' refers to a broad area of health practices, approaches, knowledge and beliefs incorporating plant, animal, mineral based medicines, spiritual therapies, manual techniques and exercises, applied singularly or in combination to treat, diagnose and prevent illness or maintain well-being".6

There are different systems of TM along with folk medicine and local medical practices. But they all share a basic worldview that there is an inherent relationship between macrocosm and microcosm, i.e., the outside universe and a living being. It is this approach that makes the TM systems an appropriate vehicle for achieving universal health and well-being in a sustainable way. For example, a major ISM, Ayurveda, is not just limited to cure of diseases. The principles of Ayurveda enunciate the way of life that leads to good health and well-being of individual and society. Ayurveda delineates the components of health as ranging from proper dietary and behavioural management (*ritucharya*

Table 1: COVID 19 Statistics for Selected Countries

Country	Cases	Deaths	Recovered	Mortality
				(in per cent)
Italy	2,22,104	31,106	1,12,541	14.0
Spain	2,71,095	27,104	1,83,227	10.00
US	14,30,348	85,197	3,10,259	5.95
China	82,929	4,633	78,195	5.59
India	78,194	2,551	26,400	3.26
World	44,41,891	2,98,296	16,68,154	6.7

Source: Worldometers.com (As on 14 May, 2020).

and *dincharya*), *panchakarma* (five therapy) procedures to medicaments and rejuvenation therapies.

With the rapid growth and development that the world has experienced over the after-war years, there has been immense progress in the field of modern medicine. We were able to eradicate many deadly CDs, and control others, although we were clearly not ready to handle advent of new CDs. The lessons drawn from earlier pandemics, such as the Spanish Flu of 1918, were all but forgotten and deemed unnecessary. The neglect could partly be explained by the fact that the global disease burden had also changed. There had been a major shift in the disease profile, from communicable to non-communicable diseases. According to the Global Health Estimates by WHO, in 2016 around 11.45 million deaths were attributed to CDs and maternal, perinatal and nutritional conditions, whereas NCDs were responsible for 40.55 million deaths globally. Cardiovascular Diseases (CVDs), cancer, respiratory illness such as asthma, diabetes and mental illness were the major killers under NCDs. After the current epidemic is mitigated, these diseases would once again come at the forefront, probably with a larger intensity due to the negligence in recent times. TM systems can prove to be effective to tackle these diseases by following the lifestyle prescriptions that are proposed by them, such as Ayurveda and Yoga. Robust empirical studies have drawn conclusive evidences that Yoga can significantly reduce the incidence of mental illness.⁷

SDG 3, which calls for Health and Wellness for all envisions Universal Health Coverage. But it is not likely that this goal will be met by relying on modern medicine approach alone, given the increased intensity of the challenge due to COVID-19. While there cannot be any doubt that modern medicine systems have been able to decrease the incidence of CDs in the past, the new viral infection has revealed several fault lines in the current healthcare regime. Increased microbial resistance to drugs has become a major problem for modern medicine. In order to actually achieve holistic health and wellness across the globe, a more integrated approach is needed that gives due importance to the systems of Traditional Medicines.

Rationale for Use of TM for SDG 3

There exist immense inter-national and intrainequalities of accessibility affordability of quality modern healthcare as can be seen in Figure 1. These inequalities can be significantly addressed by promotion of standardised and scientific use of TM. Moreover, the recent pandemic has shown that even the developed countries are not prepared to control the spread of viral infection; neither have their populations developed the immunity to fight against such infection. Since many TM systems focus on prevention rather than cure, TM could be the way forward to combat communicable diseases in the future and ensuring general wellness.

The role of TM in health care has been recognised by various national governments and international organisations. WHO acknowledges that TM has a long history of use in health maintenance, disease prevention and treatment.8 According to WHO Global report on Traditional and Complementary Medicine, 98 member countries had developed national policies on TM, 109 had placed national laws or regulations for TM, and 124 had implemented regulations on herbal medicines, by the year 2018. In total, 170 member nations of WHO have acknowledged the use of Traditional and Complementary Medicine.9 As per WHO, TM is widely used for meeting health care needs by up to 80 per cent of the population in Laos, 76 per cent in Singapore and 86 per cent in the Republic of Korea.¹⁰ Figure - 2 presents different types of popular systems of TM that have been reported and are being practised in WHO member states. In addition to what is presented, there are numerous folk medicines, oral traditional health practices and non-codified cultural expressions that form a part of daily lives of people across the globe. These statistics show that the TM infrastructure and popularity is already widespread across the globe and, therefore, it is now time that we properly integrate TM systems with general healthcare environment. WHO also acknowledges the potential of TM, and when integrated appropriately into health service delivery and self-health care, it can help effectively in promotion of universal health coverage. In fact, TM, in both drug and non-drug therapy forms, has been contributing significantly to wellness, both physical and mental, of human beings. Therefore, global promotion of TMs can have significant and positive effects in ensuring 'Good Health and Well-being' for all.

A major justification for the use of TM for achievement of SDG 3 is the fact that these systems are easily accessible and are generally more affordable than modern healthcare. TM health care is close to homes for all and hence is much more equitable and wide-spread in the world. Since the TM practitioners often live and work at the community level, it makes these systems much more accessible, acceptable and affordable than the western medicine. Timble and Rajaraman (2017) believe that integration of Traditional and Allopathic systems of medicine can make even cancer treatment more affordable and improve the quality of cancer care.¹¹

TM systems are also community based. The world over, every village or community had a healer who practices TM. It is estimated that nearly 80 per cent of the world population relies on TM for their primary healthcare needs. The reason for this widespread accessibility and distribution

of TM practice is that these are time-tested systems which have cultural and general acceptance among the masses. It is a common myth that TMs are only popular in developing nations like India, China and other Asian and African countries, but a less well-known fact is that even in developed countries like USA, Australia, France, Canada, Germany, etc., the usage of traditional, complementary and alternative medicines ranges from 42 per cent to 80 per cent.¹³ Across the continents, various indigenous systems of medicines remain popular with large number of adherents. Depending on the geographical and climatic conditions and cultural history, they are spread across political boundaries. Medicinal system like Unani, which has grown out of the fusion of traditional medicines of ancient civilisations like Greece, Egypt, Persia (Iran), China, Syria and India, is still widely prevalent in Pakistan, India, Bangladesh, and China.¹⁴ There are similar indigenous systems in South America, Africa and also in other parts of the Asian continent. What perhaps needed is a comprehensive and collaborative approach to standardise and popularise the use of these TM systems using scientific methods.

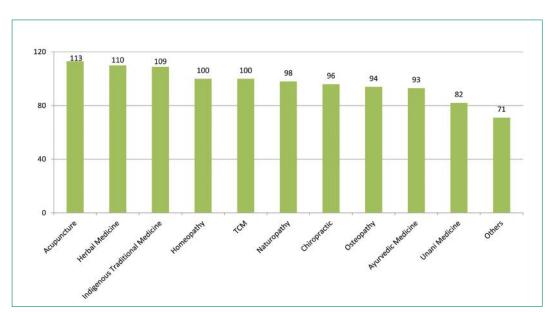


Figure 2: Types of Traditional Medicine used by WHO member states in 2012

Source: WHO Global Report on Traditional and Complimentary Medicine, 2019.

A reason behind the growing popularity of TMs across the globe is that most of them are based on natural therapies and plant based medicine; they have comparatively less adverse drug reactions than the modern medicine. The adverse effects of chemical based modern medicines and the looming threat of Anti-Microbial Resistance (AMR) have prompted practitioners and patients to look towards safer herbal based medicines and therapies. 15 Moreover, TM systems like Ayurveda, focus not merely on cure of disease but rather aim to holistically develop the health and well-being of individual through healthy and sustainable living. 16 In the efforts to achieve SDG 3, the emphasis has to be on preventive as well as curative health care. It is the overall well-being of the person that is to be the target. Therefore, TM systems like Ayurveda can play an important role in achievement of SDG-3 since they treat a person holistically and not targeting a particular disease alone. TM increases the immunity of the person and helps his own body to generate the antibodies to fight the disease and not necessarily inject an extraneous chemical entity to subdue it with possible adverse reactions or make the person eternally dependent on regular external supply of a particular chemical.

All these features of TM systems have led to the recent resurgence of interest in them and o for effectively employing them in the efforts towards achievement of SDG 3. But there are also many challenges with regard to integration of TM systems with the general healthcare environment. It is important that the issues regarding safety, efficacy, quality and rational use of TM gets taken care of. Since most of the TM systems depend largely on supply of good quality medicinal plants, ensuring the sustainable supply of medicinal plant species will play a key role in spearheading the sector.

Challenges and Policy Options

If TM systems are to become critical for achieving SDG 3 targets, state action would be indispensable. This is so because TM in healthcare sector faces unique challenges, which may continue to hinder its the scientific and rational development. Some of the key challenges are the following:

- Concerns about safety, efficacy, quality, and rational use;
- Ensuring sustained supply of TM drugs by sustainable use of natural resources like medicinal plants;
- Integration of modern and TM system in general healthcare practices, and
- Development of TM system through proper research and scientific investigation.

Each of these challenges would require specific and many times variegated policy interventions as discussed below:

- To address the concerns regarding safety, efficacy, quality and rational use, it is important to have in place world-class technical regulations and ensure traceability of all raw materials, intermediate and final products along the value chain of TM drugs and products. These regulations would have to be based on the international standards, wherever applicable, such as World Health Organisation Guidelines on Good Manufacturing Practices (WHO GMP) for herbal medicine. Governments would also need to draft similar standards for processes where international equivalent is not available.
- Similarly, strict guidelines and regulations would need to be in place for certification of TM health practitioners. The certification criteria must strictly ensure that the practitioners have adequate knowledge of the system and qualifications and ability required to practice and prescribe TM. This is needed to control fake claimants and fraudulent TM practitioners who bring bad name to the system.
- Most of the TM systems use medicinal herbs and plants. It is important that the demand for these plants is met from sustainable sources. Mass regeneration programmes are needed for the Rare, Endangered and Threatened (RET) species of medicinal plants. It is also important to incentivise medicinal plant cultivation rather than collection from forests. In this regard, Finance Minister's announcement on 15 May, 2020 that 10 lakh hectares will be covered under herbal plant cultivation in next two years is a welcome one. Systems also will have to be in place to ensure that each and every raw herb or plant that goes into

- medicine manufacturing is traceable to the origin and they are transported without any contamination. It would be a good idea to have an expert body prescribe appropriate protocols for cultivation, harvesting, transportation and storage of medicinal plants to ensure quality and value chain integrity.
- A proper integration of various systems of medicine and allowing patients to choose systems appropriate for their condition of health and sickness is needed in order to provide for an efficient environment of healthcare globally. This has to be considered as a patient empowerment programme. Like any other consumer, a patient also has to have choice of the system he/she wants. For this, we need to promote Universal Health Care (UHC) by integrating TM services into health service delivery and self-health care by capitalising on their potential contribution to improve health services and health outcomes, and by ensuring that users are able to make informed choices about one's own health care. Medical pluralism in the form of using modern medicine and traditional medicine is a comparatively new development in the western world but in countries like India the population has been quite used to it. Recent surveys showed that more than half of the Indian doctors and patients use alternative system of medicine in integration with modern medicine to cure ailments.17 The integration rightly should start with primary health care and move on to the upper tiers. For proper integration, it is necessary to impart learning about the basic principles of the other systems to students of every medicine system.
- Finally, there is need for continuous R&D in TM systems. Both India and China have extended their faith in TM during COVID-19 pandemic by encouraging the research in this sector. Many researches like the one on use of Ashwagandha for preventive treatment of COVID-19 are already on. In India, the TM research is not just focussed on finding a specific cure for the disease, but also on how to strengthen the immunity of masses using available TMs, as a measure to mitigate the corona disaster. Currently, four Ayurvedic drugs in India are being clinically tested for

their efficacy in treatment of COVID. But after the pandemic is taken care of, the importance of R&D in TM must not be overlooked. R&D should continue in all areas of healthcare with a view to continuously refine the medicines and therapies for both CDs and NCDs. Both public and private investment can be sought for research and innovation in TM sector. In order to build confidence among patients, it is important to show scientific evidences of efficacy of TM drugs. TM Knowledge can also contribute significantly to innovation in pharmaceutical sector, both modern and traditional. However, the same needs to be regulated so that the customary rights of the holders of the knowledge are respected and they are appropriately rewarded with fair share in the commercial benefits.

Conclusion

COVID-19 pandemic is likely to leave a dent on the global healthcare system. We cannot forget the future goals that we need to set for humanity because of our current problems. Once the epidemic is taken care of, we should leave no stone unturned to repair the damage and move towards the goal of UHC in the truest sense possible. In this regard as discussed above, TM systems can play a pivotal role to assist the world move towards achievement of SDG, namely health and well being of all. It is high time now that the TM sector is developed at par with the modern medicine sector. While the TM systems are already getting popular across the globe, it is important that they also get due recognition as legitimate health care systems, and are not discriminated against for R&D as had initially happened when COVID-19 pandemic began in India. It is also important that different health care systems are not looked at in isolation, but countries should rather move towards an integrative and holistic system of healthcare where both the doctors as well as patients can make informed choices among all options available to them. A major push in this regard can be achieved by extending the medical insurance for TM treatments and therapies too. Apart from developing strict regulations for the practice of TM systems, based on the international standards for production of drugs and practice of the modern medicine system, it is also important to control the false advertising and bogus claims. Certification of TM practitioners based on uniform norms should be in place. Strict action must be taken against fraudulent practitioners advertising fake claims.

Endnotes

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About FITM: The FITM has been established in the RIS with the participation of the Ministry of AYUSH as a common platform for all actors and stakeholders to contribute to pragmatic policy-making in the area of Traditional Medicine (TM) and Traditional Knowledge and to develop pro-active policies and strategies. The broad objectives of the FITM are to: undertake/ commission studies on various issues pertaining to Indian TMs, IPRs and regulatory frameworks for traditional medicinal knowledge; examine trade policy with reference to TMs; prepare cogent and coherent policy and strategy responses on emerging national and global developments; provide critical inputs such as policy briefs, briefings and reports to the Government of India in a continued and sustained way; and to facilitate interactions with experts and stakeholders and policy-makers from India and abroad. It would also provide Fellowships and Scholarships for studies in the area of TMs, arrange invited talks by national and international experts, and organize periodic consultations.



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