TRADITIONAL MEDICINE SYSTEMS OF BIMSTEC MEMBER STATES





The Current Situation of Traditional Medicine

The Bay of Bengal Initiative for Multi-Sectorial Technical and Economic Cooperation (BIMSTEC) is a regional organization comprising seven Member States, five deriving from South Asia, including Bangladesh, Bhutan, India, Nepal, Sri Lanka, and two from Southeast Asia, including Myanmar and Thailand, The regional group constitutes a bridge between South and South East Asia and represents a reinforcement of relations among these countries. Around 22% of the global population lives in the BIMSTEC region. However, the objective of this union is to share and accelerate growth through mutual cooperation in different areas including trade, technology, energy, and public health.

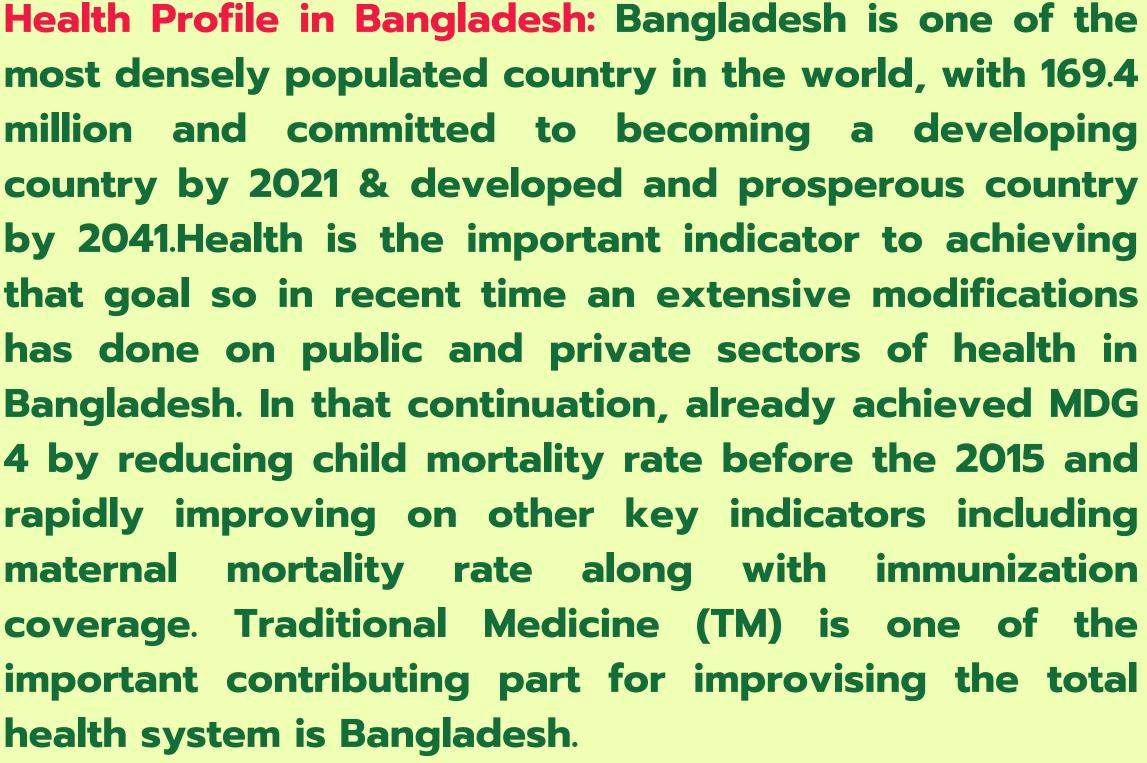
Traditional Medicine: According to World Health Organization (WHO), Traditional Medicine as "the sum total of the knowledge, skills, and practices based on the theories, beliefs and experiences indigenous to different cultures, whether explicable or not, used in the maintenance of health as well as in the prevention, diagnosis, improvement or treatment of physical and mental illness". Traditional Medicine is one of the important contributing part for improvising the total health system in Bangladesh. Here, traditional medicine consists of Unani System of medicine, Ayurvedic Systems of Medicine, and Herbal medicine.











Administration: In Bangladesh the total health systems governed Traditional Medicine including is Directorate General of Health Services (DGHS) and Directorate General of Medical Education (DGME), under Ministry of Health and Family Welfare (MOHFW). A separate wing headed by Director, Homeo and Traditional Medicine (H & TM) under DGHS controlling the TM health service part and the Director, Alternative Medicine under DGME supervised the education part of traditional systems of medicine in Bangladesh. Another headed by Line Director, Alternative department Medical Care (AMC) under DGHS also supervised and monitoring the development project of AMC (Unani, Ayurvedic & Homeo). In addition the Directorate General Drug Administration (DGDA) controlling monitoring the manufacturing companies of TM.









Service Delivery: Bangladesh is the world's eighthmost populous country, with over 169.4 million people. Doctor to population ratio is 5.26: 10,000. The number of hospital beds per 10,000 population is 6. About (75-80%) of the population live in rural and semi-urban areas still they prefer traditional medicine due to safe, cost effective, easily available treatment and its practice also deeply rooted in the cultural heritage of Bangladesh. It is reported that approximately 867 registered Graduate doctors and 4145 registered Diploma physicians & 6780 Traditional Healers are available in our country.





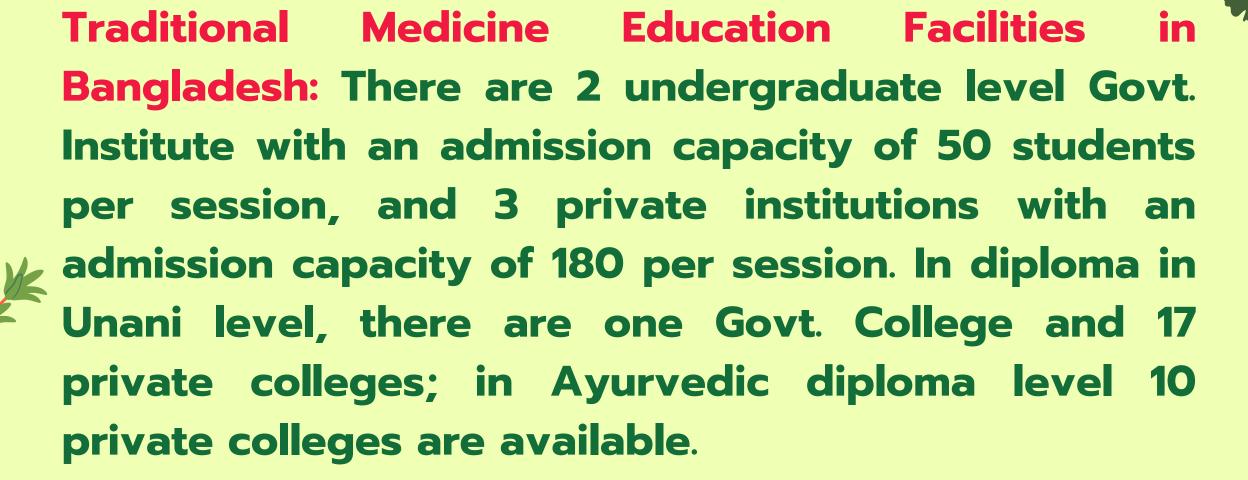


Among them TM practitioners, 2 MD, 454 BUMS, and 2450 DUMS of Unani system medicine. There are 03 MD, 413 BAMS, and 1695 DAMS in Ayurvedic system of medicine. Presently, 348 Medical Officers (Unani, Ayurvedic & Homoeopathic) are working in Government Medical College Hospitals, District Hospitals and Upazila Health Complexes in Bangladesh and remaining are working in different NGOs and private organizations. Total 569 health personnel are also working at different Districts and Upazila hospitals. This is also stated that 26% of total patients are treated by AMC doctors in the outpatient department (OPD) of government hospitals in Bangladesh. For urgent treatment facilities the GOB already setup 469 herbal gardens in District and Upazilla Health Complex as the patients can collect their based medicine for primary plant health management. So it can say Traditional Medicine playing a significant role health service in Bangladesh.











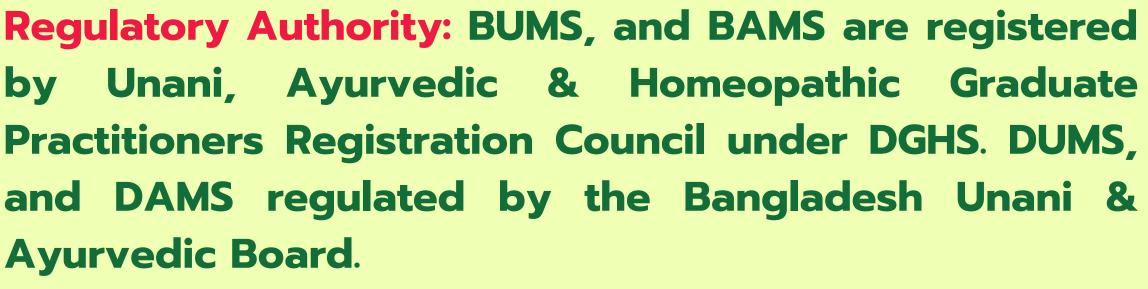


Education & Regulatory Authority: BUMS & BAMS certificates are provided by the Public University, the Unani & Ayurvedic Board provide certificate to DUMS, and DAMS.









Manufacturers and Raw Materials: More than five hundred fifty manufacturers (Unani 275, Ayurvedic 201 and Herbal 40) are producing traditional medicine in Bangladesh. Recently GOB has started a separate wing under the 'Ministry of Environment and Forest' for the leasing land for medicinal plant plantation, cultivation, promotion and research. Some NGO's also doing the same work.



Products: It is reported that nearly 600 registered products of TM are available in local market of Bangladesh.











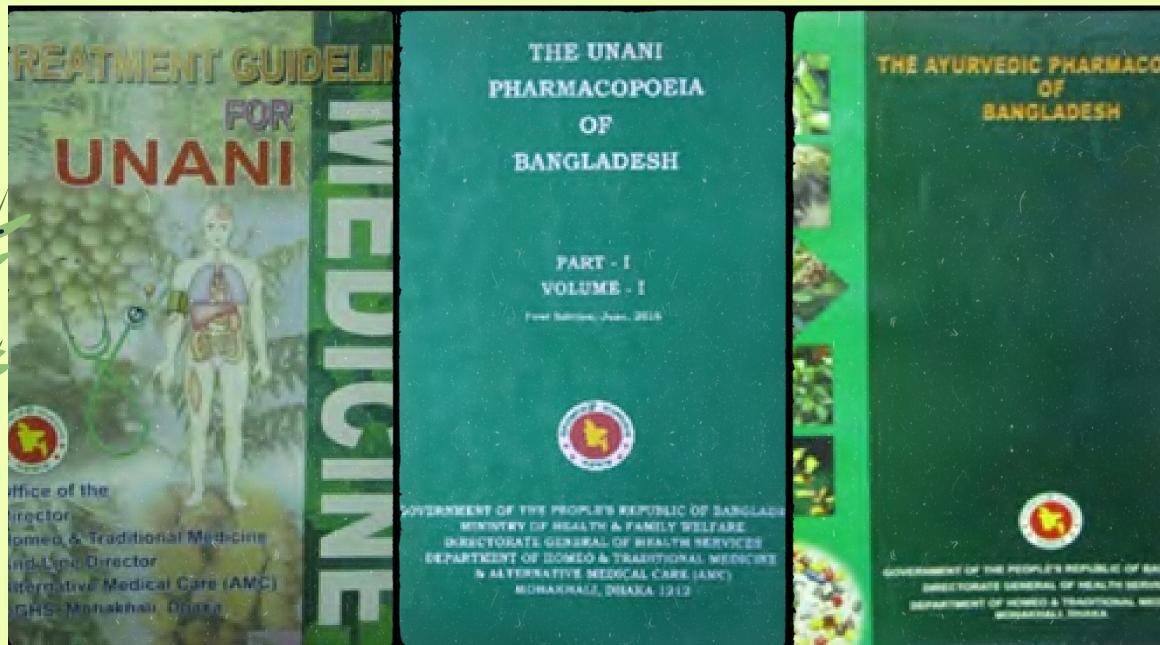


Publications: *Bangladesh National Formulary of Unani Medicine *Bangladesh National Formulary of Ayurvedic Medicine *The Unani Pharmacopeia of Bangladesh *The Ayurvedic Pharmacopeia of Bangladesh *Treatment Guideline for Unani Medicine *Treatment Guideline for Ayurvedic Medicine *Medicinal Plants Manual.

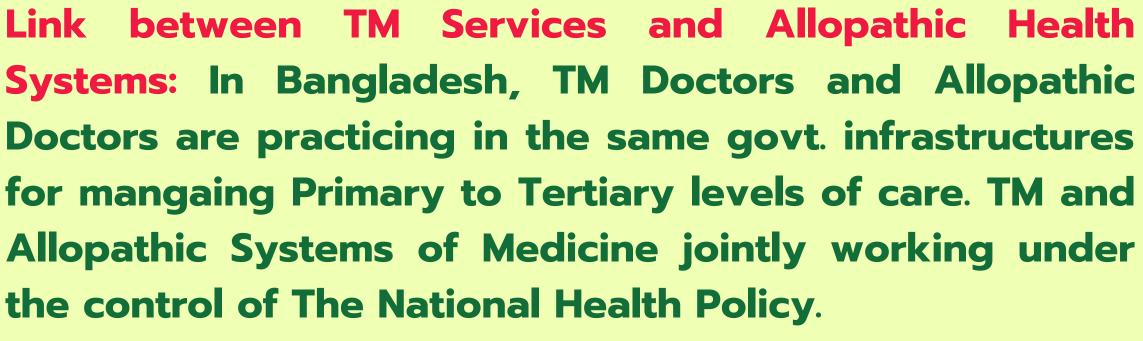




on TM.







Medicine-Related Traditional initiatives: (a) Strengthening of infrastructure (b) Standardization of Education Systems (c) Propagation of Medicinal Plant Sector d) Research & Development (e) Awareness Buildup & International Collaboration (f) Standardization and Quality Control of TM Drugs (g) Strengthening and Enforcement of mechanism related to production and sale of drugs (h) Mainstreaming of Unani & Ayurvedic systems in National Health programmer and health delivery system (i) Initiatives have been taken by the government and some private sectors to improve the traditional system of medicine. (j) The Ministry of Forest & Environment and the Ministry of Hill Tracts affairs are facilitating in preservation and documentation of traditional medicine knowledge.

Achievements: Recruited Manpower: 1051, Bachelor level TM Medical College: 02, Herbal garden: 467, Conduction of orientation workshop, training for the TM personnel and District & Upazilla Health Managers, Service delivery: 26% (At the OPD).

Challenges: Immediately to form a strong regulatory body for the regulation of practice and education and to establish a national research institute of traditional medicine.







Introduction



Many countries now recognize the need to develop a cohesive and integrative approach to health care that allows governments, health care practitioners and, most importantly, those who use health care services, to access Traditional Medicine (TM) in a safe, respectful, cost-efficient and effective manner.

The Bhutanese Traditional Medicine is one of the oldest surviving medical traditions greatly influenced by other medical systems, such as Chinese medicine, Indian Ayurvedic medicine, Unani medicine, Tibetan medicine, Greco-Roman medicine and the country's rich cultures and traditions. However, Buddhist philosophy remains the mainstream of this medical system. Its principles are based on the perception the human body is composed of three main elements: rLung (Air), mKhris-pa (Bile) and Bad-kan (Phlegm). When these three elements are in a balanced state a person is said to be healthy. The pathophysiology is also different from other medical systems, and the close link to Buddhism is reflected in the spiritual dimensions and the perception that all suffering is caused by ignorance. The treatment of diseases includes behavioural modification, physiotherapy, herbal medicines, minor surgery and spiritual healing. This makes traditional Bhutanese medicine a unique and holistic healthcare system.

The Bhutanese Traditional Medicine has maintained a steady growth and has modernized without losing indigenous knowledge. Further, it is considered one of the most sustainable methods of health care delivery as both medicines and human resources are developed within the country.

In a world where traditional knowledge is inadvertently put aside, Bhutan enjoys a unique situation. It has not only been able to grapple with the challenges of globalization but has also managed to seize many of its opportunities. The maintenance of traditional medicine not only adds dimensions to the nation's system of health care but provides a choice of health care services.









From the outset, it was envisioned that Bhutanese Traditional Medicine would complement allopathic medicine and that it would serve as an alternate form of health care. As a result, the integration of both traditional and allopathic medical services offered, under one roof in most healthcare facilities, has been a major success for healthcare delivery as the patients can opt between modern and traditional health services.

Further, as a service institution, Bhutanese Traditional Medicine has expanded rapidly not only in terms of infrastructure but also human resources and technical capacity. Currently, the Bhutanese Traditional Medicine Services provides 42 types of traditional medicine services in 80 Traditional Medicine Units and including the National Traditional Medicine Hospital. Out of these, the following are the most unique and prominent services.

1.Serkhab (Golden Needle) and NgulKhab (Silver Needle) Therapy

Is the method of inducing restorative heat through a golden and silver needle to create a balance between three humours, seven physical constituents and three excretions. These therapies were introduced in BTMS in the early 1960s' based on moxibustion therapy. Today, these services are one of the most sort after-treatments in Bhutan.







FIGURE-2-NGULKHAP APPLICATION





- Application: The sterilized golden/silver needle is heated for about 2-3 minutes until the black blotch at the shaft disappears. It is then applied to the selected pressure points with heat introduced from the base of the needle using a spirit lamp. There are 71 points within the human body where this therapy is administered. The golden needle is sometimes applied with moxa (Traden Serkhap) for chronic rLungNaed patients.
- Indications: Psychosomatic disorders, Indigestion, Edema, Gastritis, Carbuncle, Neuro-muscular related disorders, Sciatica, rLungNaed and obstinate skin diseases.
- Treatment Duration: 3-7 days (based on the conditions)
- Description of the needle: Weight-2.5 milligrams, Length-6 centimetres, Circumference-2 millimetres. The golden needle is composed of 90% pure gold while the silver needle 100 % pure silver.



FIGURE-3-TRADEN SERKHAP APPLICATION









It is the external therapy where wooden pistons and wooden blocks made from the species of Juniperus, Berberis, Morus and Spiraea are used.

- Application: The heat generated after rubbing the wooden piston on the wooden block is directly applied to the identified points of a patient's body.
- Indications: Obstinate skin diseases, Neuro-muscular, Indigestion and rLung-related disorders.
- Treatment duration: 3-4 days.

াদ্ভিক্ত স্কেইন্ট বিন্দ্ৰলৈ বিন্দ্ৰইন্দ্ৰী নিহন বিন্দ্ৰিল বিন্দ্ৰইন্দ্ৰী নিহন বিন্দ্ৰীয়া বিন্দ্ৰীয়া বিন্দ্ৰীয়া বিন্দ্ৰইন্দ্ৰীয়া বিন্দ্ৰীয়া বিন্দ্ৰীয়

FIGURE-4-SHINGTSHUK
(MADE FROM JUNIPERUS COMMUNIS)

3. Galen Maetsha (indirect moxibustion)

Is a therapeutic method of applying moxa (Leontopodium franchetii) to the pressure points.

- Application: It is applied in two methods; direct (where the moxa cone is burned directly secured with Allium sativum blistering the skin) and indirect (where a slice of fresh Zingiber officinale is used to provide a buffer to the heat generated by burning moxa, supplementing its property to the therapy).
- Indications: Chronic gastritis,
 Tinnitus, Entritis, Bloating and
 abdominal pain, Lower backache,
 Arthritis, Gout and frozen shoulder,
 Indigestion and Neuromuscular
 disorders.

Treatment Duration: 3-7 days.







4. Numtshuk (Hot Oil Compression)

Also known as Horgi Metsha, is a popular therapy that involves applying heated Carum carvi and Myristica fragrans using sesame oil.

- Application: Five grams of the powdered Carum carvi and Myristica fragrans that are made in small balls are heated in sesame oil and applied externally to the various pressure points and meridians.
- Indications: Headache due to rLung, dizziness due to BadrLung, stiffness of limbs, accelerated respiration, Psoriasis, Tinnitus, disturbed mind and eyesight.
- Treatment Duration: 3-7 days



FIGURE-6-NUMTSHUK APPLICATION

5. Tarr (Bloodletting)

It is a method of removing unwanted blood and impurities either by puncturing the veins or capillaries. The practice of bloodletting using horns or copper cups is one of the oldest treatments provided. There are seventy-seven points from which bloodletting is performed.

- Application: After cleaning the infected area, the base of the horn or copper cup is applied to the infected area creating suction by setting small Bhutanese paper on fire in a cup. Sometimes a syringe connected to the tip of the horn via a catheter pipe is administered.
- Indications: Edema, Cysts, Sinusitis, Migraine, Varicose veins and blood-related disorders.
- Treatment Duration: It is undertaken once only to drain blood, pus and other unwanted fluids from the infected area.
- Description: Only the right horn of the buffalos, cows and gayals are used that is polished maintaining their natural contour. Length-8 to 9 centimetres, Circumference- 4 to 5 centimetres. Due to the non-availability of horns, bronze, copper and borocil cups are used.







FIGURE-8-CUPPING THERAPY

FIGURE-9-RAJIB (TARR USING HORN) APPLICATION





6. NaJong (Nasal cleansing) therapy

Is the method of cleaning the nasal congestion due to sinusitis and other related disorders.

- Application: 4-5 drops of medicated oil is administered into each nostril after a brief herbal steam application, followed by a mild massage using warm sesame oil.
- Indications: Sinusitis, Rhinitis, Migraine, headache and pain due to rLung.
- Treatment Duration: 4-5 days depending on the severity of the conditions.



FIGURE-10-NAJONG THERAPY

7. Chhulum (Herbal Bath)

Boiled (and warm) water is one of the oldest means to cure different disorders. Its therapeutic property is further augmented using the herbal mixture of 32 medicinal resources. It escalates digestive process and cleanses the body and also alleviate three humors. It also improves veins system and circulation.

- Application: 250 grams of herbal mixture is boiled in 4-5 liters of clean water. The boiled herbal water is then added to the tub of hot water in which the patient is made to soaked about 30-40 minutes.
- Indications: Gout, Arthritis, Rheumatism, Neurological disorders, Muscular dystrophy, Post-traumatic pain, Parkinson's disease, Paraplegia, Hemiplegia, Hemorrhoids, Varicose veins, Colic, Sciatica, Lower backache, Cervical spondylosis, swelling of hands and legs, trembling, Periathritis, Obstinate skin diseases, Strains, Sprains.
 - **Treatment Duration: 3-7 days**



FIGURE-11-CHHULUM THERAPY





The Ministry of Ayush is responsible for policy formulation, development and implementation of programs for the growth, development and propagation of Indian Traditional Systems of Medicine popularly known as Ayush Systems of Medicine:

- Ayurveda
- Yoga & Naturopathy
- Unani,
- Siddha, Sowa Rigpa and
- Homoeopathy.

The Department of Indian Systems of Medicine and Homoeopathy (ISM&H) was established in the Ministry of Health and Family Welfare in 1995. The Ministry of Ayush was formed on the 9th of November 2014.

Ministry of Ayush Government of India

กรมระบบการแพทย์อินเดียและโฮมิโอพาธี (The Department Indian Systems of Medicine and Homoeopathy: ISM&H)

The Ministry has five ResearchCouncils, 12 NationalInstitutes, two Statutory Regulatory Commissions, one regulatory organization for Pharmacopoeia matters, one Public Sector Undertaking and a National Medicinal Plants Board under its administrative fold.

Website: www.ayush.gov.in

Ministry of Ayush is headed by Shri Sarbananda Sonowal Hon'bleCabinet Minister for Ayush Dr. Munjpara Mahendrabhai Kalubhai Hon'ble Minister of State for Ayush





The majorachievement of the Ministry of Ayush:

1. Education

- New Legislations enacted National Commission for Indian Systemof Medicine (NCISM) Act, 2020 and NationalCommission for Homoeopathy (NCH) Act, 2020 were enactedon 21st September, 2020, to replace the existing Indian Medicine Central Council Act, 1970 and Homoeopathy Central Council Act, 1973 respectively. Accordingly, as per the provisions of the said Act, the statutorybodies National Commission for Indian System of Medicine (NCISM) and National Commission for Homeopathy have been established replacing the earlier Central Council of Indian Medicine (CCIM) and Central Council of Homoeopathy (CCH) with an aim to regulate the standards of education, teaching training, recognition of degrees, and practice of Indian System of Medicine and Homoeopathy. Undergraduate, Postgraduate and PhD courses are available in Ayush systems of medicine.
- Establishment of first Institute of National Importance (INI) in Ayush sector: The Institute of Teaching and Research in Ayurveda (ITRA) at Jamnagar, Gujarat is the first and only institution with INI status in the Ayush Sector.











- Status of Deemed to be University on National Institute of Ayurveda (NIA)
 Jaipur: NIA was conferred the Deemed to be University status under De novo category. NIA is the first Central Government funded Institute to be declared as Deemed to be University in the field of Ayush.
- Setting up of All India Institute of Ayurveda, New Delhi: The first ever All India Institute of Ayurveda (AllA), set up along the lines of All India Institute of Medical Sciences to bring synergy between the traditional wisdom of Ayurveda and modern diagnostic tools and technology.



National Institute of Ayurveda, Jaupur



All India Institute of Ayurveda

2. Research

Research Councils: The Ministry of Ayush has set up five Research Councils as Autonomous Institute for undertaking researchin Ayurveda, Homoeopathy, Unani, Siddha and Yoga and Naturopathy. The research activities of the Councilsinclude medicinal plant research (Medico-ethno botanical survey, pharmacognosy and tissue culture), Drug Standardization Pharmacological Research, Clinical Research Literary Research & outreach activities. The Central Council for Research in Ayurvedic Sciences (CCRAS) is the apex body for conducting scientific research in the field of Ayurveda with a network of 30 institutes acrossthe country.









- The core objectives of CCRAS are development of safe and effective formulations/therapies for management of diseases of national and global importance; validation of classical Ayurvedic formulations; translational research including technology transfer and patents; research oriented public health activities.
- Effective Documentation of Research in Ayush: Huge repository of extensive research works by various stakeholders in Ayush is created online at a dedicated website: Ayush research portal, cataloguing 37639 research publications. The portal is actively management by CCRAS, Ministry of Ayush and is made in a searchable format and includes publications in indexed journals. This provides a showcase of evidence-based Ayush systems and a ready solution of researchers and academicians.















• Advanced R&D through Ayush based fundamentals: Under Centre of Excellence of Ministry of Ayushat Institute of Genomics and Integrative Biology(IGIB) CSIR, relation of Ayurveda Prakriti is made with the Genome

sequence, making it a landmark study toward personalized preventive and predictive medicine, they are also getting promising outcomes on Gut Microbiota

and working on advance biology of metabolomics,

Proteomics etc. to shape the future of healthcare sector. R&D initiatives in COVID 19: Total 150 research studies have been done in Ayush systems. Based on R&D outcomees "one Ayurveda and one Siddha Medicine" was successfully repurposed for management of COVID 19 and provided to the public across the country at large. Total of 63 Research Publications are available in reputed Journals, 33 are available in preprints and 40 are in different levels of publications.









3. Ayurveda, Siddha, Unani & Homoeopathy (ASU&H) drugs

- The Drugs & Cosmetics Act, 1940 and Drugs & Cosmetics Rules, 1945 have exclusive regulatory provisions for Ayurvedic, Siddha, Unani, and Homoeopathy drugs. As prescribed in Drugs and Cosmetics Act 1940 and Rules 1945 made thereunder, enforcement of the legal provisions pertaining to regulation and Quality Control of Ayurveda, Siddha, and Unani drugs, is vested with the State drug Controllers/ State Licensing Authorities appointed by the concerned State Government/ Union Territory.
- Good manufacturing Practices (GMP): As per provisions under Rule 157 of Drugs & Cosmetics Rules, 1945, the manufacture of Ayurvedic (including Siddha) or Unani drugs shall be carried out in such premises and under such hygienic conditions as are specified in Schedule T.
- Standardization of ASU&H Drugs: Pharmacopoeia Commission for Indian Medicines and Homoeopathy (PCIM&H), is subordinate office under Ministry of Ayush which lays down Pharmacopoeial Standards and Formulary specifications for Ayurveda, Siddha, Unani & Homoeopathy (ASU&H) drugs, which serve as official compendia for ascertaining the identity, purity and strength of the drugs included therein. 2259 quality standards on raw materials used in ASU&H: (Ayurveda: 665; Siddha: 139; Unani: 338; Homoeopathy: 1117); 405 qualitystandards of ASU formulations (Ayurveda: 203; Siddha: 01; Unani: 201); 2666 Formulary specifications of ASU (Ayurveda: 1036; Siddha: 400; Unani: 1230); Supporting documents in the form of Macro-Microscopic & TLC Atlas on 351 single drugs incorporated in API are also been published.









 National Medicinal Plants Board (NMPB): NMPB has undertaken various activities to augment the medicinal plant resources in the wild and promotetheir large-scale cultivation in the farmers' fields. Voluntary Certification Scheme for Medicinal Plant Produce (VCSMPP)-Designed in collaboration with Quality Council of India (QCI) to encourage Good Agricultural Practices (GAPs), Good Field Collection Practices (GFCPs). e-charak-Platform for sale, purchase of Medicinal plants raw material and to facilitate information exchange betweenvarious stakeholders involvedin the medicinal plants sector.Bhuvan e- herbs- NMPB has developed a mobile based application called Bhuvan e-herbs in collaboration with RRSC-west, ISRO, Jodhpur to geo-tag projects and facilitate online monitoring of medicinal plants related projects supported by NMPB.

4. Ayush Servicesin Public Health

• National AYUSH Mission: With a view to strengthen Ayush services throughdeveloping infrastructure and improvingaccess to Ayushhealthcare in the States, Centrally Sponsored Scheme, focusing on Preventive and Promotive aspects of healthcare, known as National AYUSH Mission (NAM) was launched on Sept. 2014. Under NAM States/UTs are implementing different activities like a supplyof essential drugs/Medicines to the patients, Public Health OutreachActivity, School HealthProgramme, Ayush Gram etc. to promote holistic treatment under Ayush so as to improve the general health and immunity.





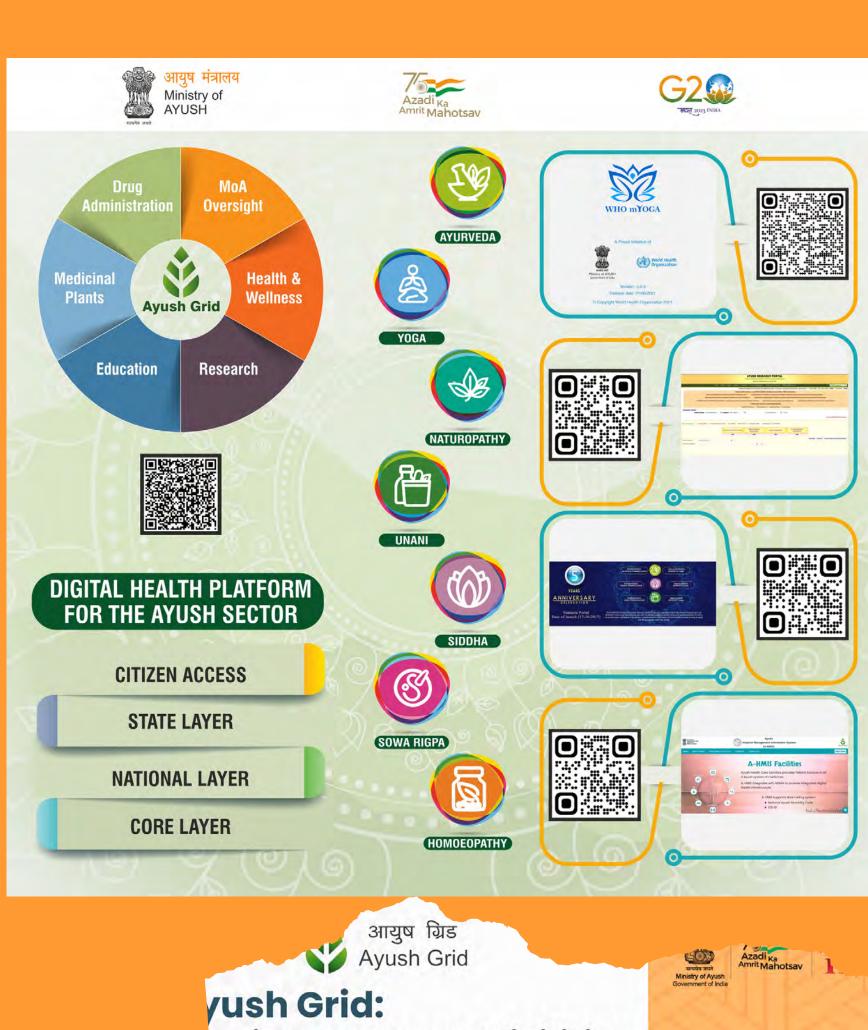




- Insurance Coverage for Ayush Health Care services: Under IRDAI regulations, about 27 insurance companies are offering more than 140 policy products covering one or more systems of Ayush treatments since 2016.
- National Accreditation Board (NABH) To provide safety and Efficacy in the Service sector National Accreditation Board for Hospitals & Healthcare Providers (NABH) is a constituent board of the Quality Council of India, set up to establish and operate an accreditation programme for healthcare organizationns. Ayush Hospital Accreditation Program for Ayush hospitals encompasses relevant & comprehensive quality assurance standards for each Ayush system. It is going successfully and so far 153 Ayush hospitals and 40 Panchkarma clinics have been accredited. It has been planned to accredit all the Ayush hospitals and Panchkarma clinics in the next one year.
- The Bureau of Indian Standards (BIS) is the National Standard Body of India, responsible for the development of Indian standards for products, processes, and services related to all consumer goods. Recently, BIS has created a dedicated department of standardization in the Ayush systems. Total 28 standards related to different topics like single herbs (17), Ayurveda and Yoga terminologies (6), Panchakarma equipment (2), Cotton Yoga Mat (01), Yoga centre-service requirements (01), and test methods for pesticide residue in herbs used as ingredients in traditional medicines (01) have already been published under these departments.









5. Technology

Ayush Grid, a robust digital health care system, has been created under the Ministry of Ayush. It is a comprehensive IT backbone for the entire Ayush sector and is aligned with Ayushman Bharat DigitalHealth Mission (ABDM).It will generate real time data covering all aspects of Ayush systems including services, products, education, production, market size, demand supply mapping etc. 22 key Digital initiatives under the Health Information database/ Research system, library, and Academic and Information Education and Communication (IEC) have been developed.

6. Exponential growth in Ayush Ayush industry witnessed considerable growth in market size the since upgradation of Department of **Ayush to Ministry of Ayush in the** year 2014. Ayush manufacturing industrywas INR **21,697crores** (USD 2.85 Bn) in 2014- 15 and in the latest study of RIS of 2020, the Ayush manufacturing industry size has been estimated at INR 137,800 crores (USD 18.1 Bn) that is 6 times rise in 7 years.







- Establishment of WHO Global Center for Traditional Medicine (WHO GCTM): An outpost of WHO Headquarter at Jamnagar India:Foundation stone of WHO GlobalCentre for Traditional Medicinewas laid in the presenceof Hon'ble PrimeMinister of India, Hon'ble Prime Minister of Mauritius, and DG-WHO in April 2022 and an interim office of WHO GCTM has been made functional. This is the first UN outpost in a developing country.
- Yoga promotion by WHO: WHO in collaboration with Ministry of Ayush launchedWHO mYoga app to demonstrate CommonYoga Protocol (CYP) for wellnessand for globaluse for correct practices of yoga under 'Be He@lthy, Be Mobile' initiatives.

Ministry established Yoga Certification Board: It is the only

Board which has been set up by any Government for certification in the field of Yoga. The YCB certifies Yoga professionals under various levels and category so that the Yoga Professionals can select the level and category as per their skills and competences. The competences range from basic yoga protocol to Yoga master, from assistant Yoga therapist to Yoga Therapy Consultant. The certified Yoga Professionals are exposed to better job opportunities across the globe. YCB offerscertificates to Yoga professionals to practice Yoga as therapy. Total certified Yoga professionals are 53634. YCB is also accreditating Yoga Institutions / centres based on their years of existence, scale of operation and experience in the field of Yoga. This will ensure that the Yoga institution will get recognition for their contribution towards Yoga. The Institutions are accreditated under 4 levels. This will help in bringing standards in teaching and practice of Yoga among various Institutions without interfering in their delivery system. Synchronization of Yoga legacy and certificate will produce trained and qualified Yoga Professional.







- WHO on Ayush systems: Benchmark for training and treatment in Ayurveda, Yoga and Unani System of Medicine has been published.
- Ayush in International Classification of Disease: Ministry of Ayush supported for inclusion of Ayush Morbidly and standardized codes for inclusion in second Module of Traditional Medicine Chapterof ICD-11, consensuson Alfa draft is made among member countries in record time and work on beta draft is in progress. This will open opportunity for documentation, recording, study of TM at global and for promoting commerce and positioning Ayush in different parts of the world.
- 25 Memorandum of Understandings (MoUs) for country to country cooperation in the field of Traditional Medicine. 46 MoUs for undertaking collaborative research and development of Traditional Medicine. 15 MoUs have been signed for setting up of Ayush Academic Chairs in foreign Institutes/Universities. 37 Ayush Information Cells in 34 countries to disseminate authentic information about Ayush systems of medicine.
- Ministry of Ayush has set up an Ayush ExportPromotion Council (Ayushexil) to promote the export of Ayush Products/ Medicines as well as Ayush services globally and for harmonization and standardization of regulatory practices.
- Ayush Fellowship program of IC scheme: Under the Ayush Fellowship programof the IC scheme, 104 scholarships are offered every year to eligible foreign nationals from 101 countries for pursuing Ayush coursesin premier institutes in India. A total of 70 seats have been confirmed under the scheme for the academic year 2021–2022. At present, 277 students from the following 32 countries are taking Ayush education in different institutes under Ayush Fellowship Scheme.
- The provision of Medical Visa and Medical Attendant Visa has been made with 166 countries to get Ayurveda treatment.



1. National Policies and Governance



1.1 Systems of traditional & complementary medicine (T&CM)

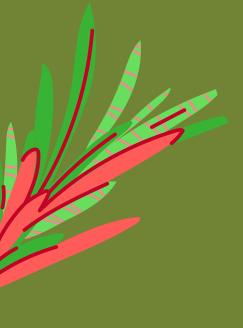


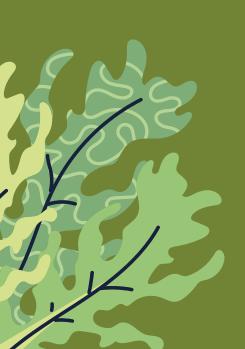
- Desana Naya system based on Buddha's teaching and natural phenomenon
- Beithizza Naya system based on Ayurvedic concepts
- Netkhatta Naya system based on calculations of zodiac of stars, planets, time of birth and age
- Veizzadhara Naya system –
 meditation, psychotherapy, sooth
 saying, charms, mantra,
 supernatural therapies and
 practices of, alchemy

Ayurvedic Medicine
Traditional Chinese Medicine
(Acupuncture)

Promotion of research activities on TM included in Para. 14 of National Health Policy. "To reinforce the service and research activities of indigenous medicine to international level and to involve in community health care activities"

- Department of Traditional Medicine, Ministry of Health in central level
- State & Division of Traditional Medicine Department (15) in intermediate level
- District Traditional Medicine Department (50) in district level
- Township Traditional Medicine
 Department (211) in peripheral level





1.2 Policy and administration





1. National Policies and Governance

1.3 National office

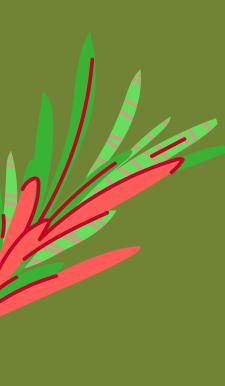
Department of Traditional Medicine, Ministry of Health

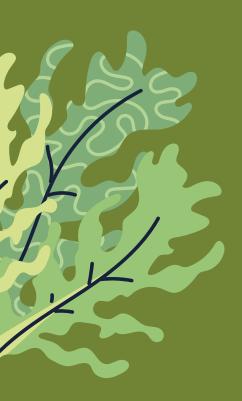
2. Education, Training, and Human Resource for Health (HRH)

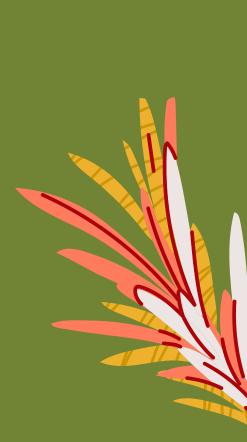
The Institute of Traditional Medicine has been established since 1976 and it is located in Mandalay and was suspended on 2007-2008 academic year. (Decided by National Health Committee)

- 2187 gained Diploma
- University of Traditional Medicine has been established in 2002 Mandalay.
- Bachelor of Myanmar Traditional Medicine (B.M.T.M.) (Regular course) (2001 to 2022) - 1568
 Graduated
- Bachelor of Myanmar Traditional Medicine (B.M.T.M.) (Bridge course)
 (2012 to 2022) – 180 Graduated
- Master of Myanmar Traditional Medicine (M.M.T.M.) (2012 to 2022)
 - 87 Graduated

2.1 Education & School or University









2. Education, Training, and Human Resource for Health (HRH)



2.2 Training



- Other training courses on TM include CTME, special TM training etc (Desana Naya, Paediatric and Physical Medicine).
- Hospital Management and Leadership
 Training for Traditional Medicine

 Practitioners
- ASEAN Good Manufacturing Practice (GMP) Training on Traditional Medicines and Health Supplements (TMHS) for TM Industry Players
- Quality Management System
 Trainings ISO 9001:2015
- Stability and Shelf-life Training
- Research Methodology Training

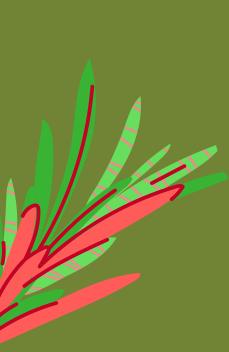
2.3 Law & regulation on T&CM practice and licensing system

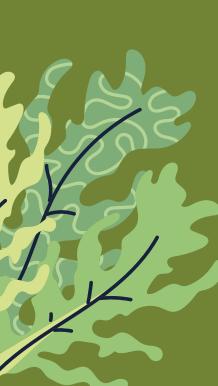
According to Myanmar Traditional Medicine Council Law (2000), the license for practice is issued by Traditional Medical Council:

 Person who have Diploma or Bachelor Degree of Myanmar traditional medicine

2.4 Human
Resource for
Health (HRH)

7492 traditional medicine practitioners have been registered as of 2023







3. Traditional / Herbal medicines

3.1 Manufacturing

Traditional Medicine Manufacturing license – 3620 (as of May, 2023)

3.2 Manufacturing standard

GMP are considered before given the licenses.

3.3 Law & regulation on traditional & herbal medicines

According to TM drug Law, all of the TM drugs produced in the country have to be registered and the manufacturers must have license to produce their products

3.4 Product registration

15782 herbal medicines have been registered production as of Feb 2023

3.5 Herbal pharmacopoeia or monographs

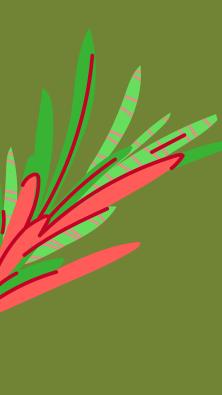
- The Monograph of Myanmar medicinal plants Vol I and II were published in 2000 and 2007.
- Myanmar Herbal Pharmacopoeia Vol-1 and Vol-2 was published in 2013 and 2018.

3.6 List of Essential Medicines

The national essential traditional medicine drug list of 86 TM drugs is approved by MoH.

4. Traditional/herbal medicine database

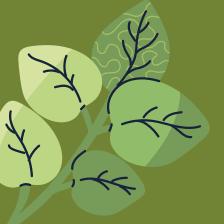
DTM HOME PAGE WWW.DTM.GOV.MM







5. T&CM Service Package



5.1 Facilities
offering T&CM
Service

including Health services care medicine **Traditional** government formulation for use in traditional clinics and hospitals under the Ministry are manufactured by pharmaceutical factory in Mandalay that produce 29 kinds of **Traditional** Medicines which provided free of charge to be dispensed in public Traditional Medicine facilities.

5.2 Standards of service

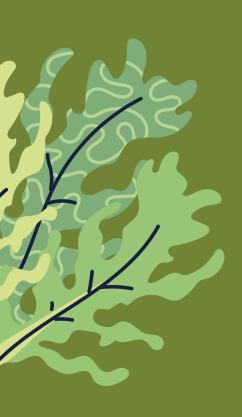
MoH sets the guidelines and DTM control and monitor all TM Hospitals and Clinics

5.3 T&CM
practitioner
density and
distribution

Number of T&CM practitioners per population (1/7937)

5.4 Outpatient
Department visit
for T&CM
services

Total number of 49 TM hospitals. There are three (100) bedded teaching TM hospitals, nine (50) bedded TM hospitals, thirteen (25) bedded hospital and twenty-four (16) bedded TM hospitals. There are no private TM hospitals up to now.





NEPAL

Traditional medicine and especially Ayurveda in Nepal is not just a system of medicine but mostly a way of life. It is an alternative medicine from the perspective of government. However, from the view of majority of people it is the mainstream medicine system which serves for preventive, promotive and curative health in different walks of life. Many people still use it as first choice of medicine. For some, it is the last resort. And for others, it provides a strong alternative approach for range of medical problems.

Although Ayurveda is the most popular traditional system of medicine in Nepal, there are various other traditional systems of medicine such as Yoga & Naturopathy, Amchi, Acupuncture and Traditional Chinese Medicine, Yunani and Homeopathy. These systems are guided and recognized by various national legislature, policies and acts. Mainstream system of health in Nepal is conventional western system of allopathic medicine. However, it is estimated that more than eighty percent of Nepalese population use Ayurveda along with other alternative medicine in various ways.

Ayurveda has deep rooted tradition, strong cultural support & centuries old history. So, different levels of government of Nepal are trying to integrate it as Essential health care services. Not just in every district but in various local levels there are institutions of traditional medicine (Ayurveda). However, government has not been able to establish such institution in all of its local level yet.





NEPAL

Major Highlights



- There is regulatory council 'Nepal Ayurveda Medical Council' for quality assurance of traditional medical practice in Nepal.
- Minstry of Health & Population has allocated unit for policy making, Co-ordination & Monitoring of <u>Traditional medical systems in Nepal.</u>
- Nepal has wealth of resources in Ayurveda (traditional) medicine: Nearly 4,000 hand written classical manuscripts, rich biodiversity, and diverse ethno-botanical, ethno-traditional, tantrik & spiritual knowledge are just few examples of them.

Major organizations of Traditional Medicine in Nepal:

- Department of Ayurveda & Alternative Medicine:
 DOAAM) An apex body of Ayurveda
- Central Ayurveda Hospital (100 beds with 18 cabins),
 Naradevi, Kathmandu for ayurveda health services delivery
- Singh Durbar Vaidhyakhana- for quality Ayurvedic medicine production

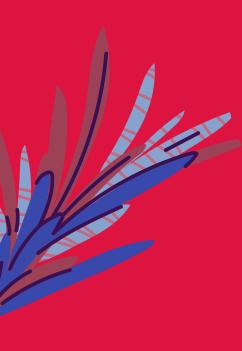


DEPARTMENT OF AYURVEDA & ALTERNATIVE MEDICINE













NEPAL



- National Ayurveda
 Research & Training Center
- National Ayurveda Academy (in Policy discussion phase)
- Panhakarma Hospital,
 Budhanilakantha (Ongoing project)
- Zonal hospitals
- District health center
- Local dispensaries
- Pashupati Homeopathic Hospital: 15 beds
- Numerous private hospitals
 & institutions- Ayurveda,
 Yoga & Naturopathy,
 Traditional Chinese
 Medicine



- Specialists- 153
- Doctors (Bachelor Level): 913
- Paramedics- AHA: 1800
- Paramedics- Vaidhya: 3300
- Traditional healers-19



NATIONAL AYURVEDA RESEARCH & TRAINING CENTER



PASHUPATI HOMEOPATHY HOSPITAL





Traditional knowledge in Sri Lanka

Most recently, in 2012, Intellectual Property and Genetic Resources (the IGC) provided two possible definitions of Traditional knowledge

Option 1: For the purposes of this instrument, the term "Traditional knowledge" refers to the know-how, skills, innovations, practices, teachings, and learning, resulting from the intellectual activity and developed within a traditional context; and

Option 2: Traditional knowledge is the knowledge that is dynamic and evolving, resulting from intellectual activities which are passed on from generation to generation and include but are not limited to knowhow, skills, innovations, practices, processes, and learning and teaching, that subsist in codified, oral or other forms of knowledge systems. Traditional knowledge also includes knowledge that is associated with biodiversity, traditional lifestyles, and natural resources.











In Sri Lanka, existing systems of Traditional knowledge include Traditional Administrative Systems, Traditional Social Systems (Caste Systems), Irrigation Systems, Traditional Legal systems, Architecture including Traditional Village Planning, Art Literature, Religions Buddhism, Hinduism, Islam, Rituals, etc. Traditional knowledge is an intangible cultural heritage of the citizenry that portrays the rich civilization and variety of the community. By recognizing traditional skills and knowledge, cultural diversity can be promoted. Pluralistic and multi-cultural societies give a chance to their members to take care of their own identity which contributes to satisfaction and self-fulfillment. Traditional knowledge promotes the Culture of the nation, a national identity shaped by cultural traditions and by language. Due to Traditional knowledge's impact on culture, sustainable development, environmental conservation, food security, agriculture, traditional healing, and well-being the importance of protecting traditional skills and knowledge internationally and nationally has been repeatedly emphasized.

A traditional medical practitioner is a person who is recognized by the community in which he lives as competent to provide traditional health care. Traditional knowledge in health and wellness is, providing health care guidance and treatment by using herbal, animal, and mineral substances and certain other methods based on the social, cultural, and religious background, and therefore the knowledge, attitudes, and belief that are prevalent within the community regarding physical, mental, spiritual and social well-being and therefore the causation of diseases





Historical Evolution of traditional medicine in Sri-Lanka

There have been numerous achievements in traditional skills and knowledge in health and Well-being in ancient Sri Lanka. Historians claim that Sri Lanka is the first in the world to have established dedicated hospitals.

The Mahavamsa (meaning 'Great Chronicle') is one of the most important works of ancient literature from the island of Sri Lanka. Mahavamsa was mentioned the concept of hospitals has been established in Sri Lanka during the era of Pandukabaya, within the fourth century BC. There are four types of hospitals in Ancient Lanka. Namely, (a) monastic hospitals where inhouse treatment was provided for ailing monks for short or long periods; (b) hospitals for laymen where in-house treatment was provided (c) maternity homes, and (d) hospitals where only outdoor treatment was provided. Some surgical instruments found during the excavations show the tendency toward high standards of technology and similarity with the surgical instruments within modern western science.7 The Sarartha Sangrahaya, a comprehensive manuscript that Sri Lankan physicians still use today for reference was written by King Buddhadasa in 398 AD. Ancient inscriptions on rock surfaces reveal that organized traditional medical services have existed within the country for centuries and have treated not only humans but also animals. References and evidence to healthcare in ancient Sri Lankan literature display the awareness among the people of traditional medical treatment methods as well as the performance of surgery on humans and on animals. Some examples are Sadharmaratmavaliya which prescribes first aid for many sicknesses; the Butsarana mentions that a mother would take medicine herself when her baby was sick; the Sivi Jataka which refers to the donation of an eye.

The Culavamsa refers to performing surgery on a snake by king Buddhadasa, in 337 – 365 AD and King Parakramabahu I (1123- 1186 AD) treating a crow suffering from an ulcer that had formed in her cheek.12 Ancient inscriptions on rock surfaces reveal that organized medical services have existed within the country for centuries. In fact, Sri Lanka claims to be the first country in the world to have established dedicated hospitals with the capability of performing surgeries even for animals. The Sri Lankan mountain Mihintale still has the ruins of what many believe to be the first hospital in the world. Old hospital sites now attract tourists, who marvel at the beautiful ruins. These places have come to symbolize a traditional sense of healing and care, which was so prevalent at that time.





Traditional health care in ancient Sri Lanka would return about 5000 years consistent with ancient legends. King Ravana was said to be a great physician who ruled over Sri Lanka from 2554 to 2517 BC. And in that era, Sri Lankan was achieved great advancements in science and medicine. In ancient times there was a symposium called Ayurvedava tharanaya (Discovery of Ayurveda) was held in the Himalayas and Pulasthi Rishi is the one and only physician in that symposium was represented, in Sri Lanka. Ravana is supposed to have written four books on healthcare. Rumassala, a mountain peak by the Southern oceans of Sri Lanka is too linked to the Ravana legend and is held to be a part of the Himalaya Mountain. The mountain filled with medicinal plants was allegedly brought to Sri Lanka to treat the injured of the Rama-Ravana war and was left in the country and is still filled with herbs of rare medicinal value. Some forms of traditional medical treatment have existed in the pre-history, long before the arrival of Vijaya and the Indians. Mother Goddess, Ancestral worship, like the Yakku of the Veddhas, Tree worship have been part of the treatment for ailments in pre-history. The wealth of traditional skills and knowledge that has been produced by the inhabitants of Sri Lanka throughout its long history has been used effectively for the human and socio-economic development of the country.







The Traditional method of harvesting medicinal plants and quality medicinal preparations

The traditional method of harvesting from medicinal trees is an art that preserves healing properties embedded in green pharmacy. The worshipping and respecting medicinal trees is a practice generally accepted as a cultural norm. It claims that natural healing properties are preserved throughout the process of manufacturing. Harvesting medicinal plants from natural habitats with the preservation of their medicinal properties is an age-old practice performed by the healer himself. Traditional medical practitioners respect nature's healing properties embedded within the plants with the blessings of divine forces dwelling in the trees. They believe that harvesting such parts from a plant should be done after performing a special ritual. This ritual claim to gain permission from the deities dwelling in the tree, processing raw materials is an integral part of quality medicinal preparations like decoctions, oils, powders, pastes, pills, and other concoctions.

According to the traditional belief system when this is done manually medicines will be bearing better efficacy. Therefore, all the traditional practitioners prefer to do all processing manually to preserve the natural qualities. Practitioners believe that they should get permission from divine forces before initiating preparing medicine and they offer oblations for the sake of protection and better efficacy of the medicine. For this ritual, they select an auspicious day and a time for offering the oblations. with special recitations. Rituals in medicinal preparations are believed to enhance the potency of the drugs and will have a supra-natural effect. They perform a ritual on the night before the roots of a medicinal tree are removed to get the permission of the deity abiding in that tree. This ritual symbolizes the cultural value system that supports the conservation of natural resources through propagating the divine healing power of nature as a living entity. Some medicinal oils with supra-medical uses under the influence of malicious forces should be prepared with special ritualistic oblations to guard the oil from bad spirits and enhance its healing power. It is an overnight ritual to install the divine powers upon the site of manufacturing to safeguard the medicine. The ritual is performed by the practitioner assisted by his pupils or family members who should be observed in special routines mannered according to restrictions and taboos.

The traditional medical system in Sri Lanka concerns the promotion of humans' physical and mental health and social wellbeing. Traditional medicines are delivered either free or at a relatively low cost. Communities of the country still believe that some of the medical requirements perform more successfully by indigenous medicine than in other systems of medicine practiced in the country. Nordstrom (1988) listed some of the diseases specialized by indigenous medical practitioners: fractures, poisonous snake-bites, eye diseases, hepatitis, skin diseases and boils, children's disorders, sinusitis, intestinal disorders, and stroke or paralysis. Around 60 to 70% of the rural population, which comprises 77.3% of the total population, rely on Traditional medicine for their primary health care. It is concluded that the age, income distribution, or educational qualifications of the communities do not materialize the use of traditional medicine. Traditional medical knowledge and skills, in general, are embedded in the communities in the country, where such knowledge is inherited from their families and society.

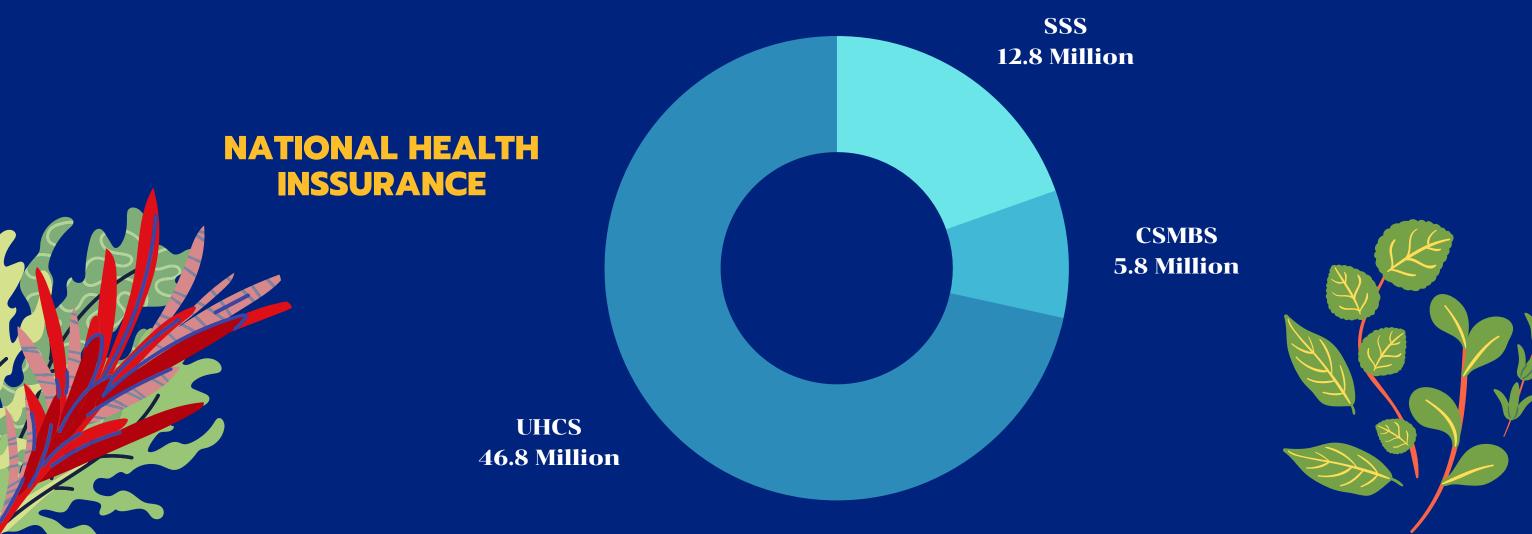
The Declaration of Alma-Ata in the year 1978 by the World Health Organization (WHO) had a significant impact on Thailand, leading the country to declare the National Primary Health Care Policy in its National Health Programme in 1981. Since then, there has been a widespread acceptance and recognition of traditional medicine, folk medicine, and other alternative forms of healthcare in Thailand.

In 2003, the Department for Development of Thai Traditional and Alternative Medicine (DTAM) was established, marking a significant milestone in the development of traditional and alternative medicine in the country. Subsequently, in 2017, the department underwent a name change and became the Department of Thai Traditional and Alternative Medicine.

In 2009, the Second National Health Assembly passed Resolution 7, which emphasized the development of traditional medicine, folk medicine, and alternative medicine as primary healthcare services, alongside modern medicine. In 2013, Thai Traditional Medicine Professions Act, B.E.2556 (2013) was enacted, and in the same year, the Thai Traditional Medicine Council was established.

Traditional Medicine Service System

The National Health Security Act, B.E.2545 (2002) ensures that every Thai citizen has the right to receive healthcare services that are standardized and efficient. To support and promote the provision of healthcare services, the act establishes the "National Health Security Fund." The fund serves as a financial support system for healthcare units, enabling widespread and effective access to healthcare services for all Thai people. The National Health Security Office (NHSO) is responsible for managing the fund in accordance with regulations set by the National Health Security Committee. Within the healthcare system, there are three major categories of healthcare entitlements, namely: Universal Health Coverage Scheme (UHCS), Social Security Scheme (SSS), and Civil Servant Medical Benefit Scheme (CSMBS).





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Public Health

Again and politicities providing both traditional medicine and modern medicine services under the Ministry of

7.2 7.2 8.19 8.19

The Ministry of Public Health has expanded the inclusion of traditional medicine and integrated medicine services into the national healthcare system as part of the service plan. In the year 2015, this development resulted in increased support in terms of budget, personnel, and other relevant resources. The overall healthcare system in Thailand comprises over 12,000 facilities, both public and private sectors. The Ministry of Public Health has organized the healthcare system into 13 health regions covering all 77 provinces. Thai Traditional Medicine and Integrated Medicine Hospitals are under the Department of Thai Traditional and Alternative Medicine, Ministry of Public Health serving as prototype units of the Department. At present, the hospitals located in Bangkok and Nonthaburi province, Health Region 8, Udon Thani province, Health Region 9, Surin province, and Health Region 12, Phatthalung province.

Types of Thai traditional medicine services usually found in public health facilities



MEDICAL PRACTICE (EXAMINATION, DIAGNOSIS)



HERBAL MEDICINES



NUAD THAI (THAI MASSAGE)



HOT HERBAL COMPRESSION



HERBAL STEAM BATH



HOT SALT POT COMPRESSION & OTHER POST-PARTUM CARE

Educational System of Thai Traditional Medicine (TTM)

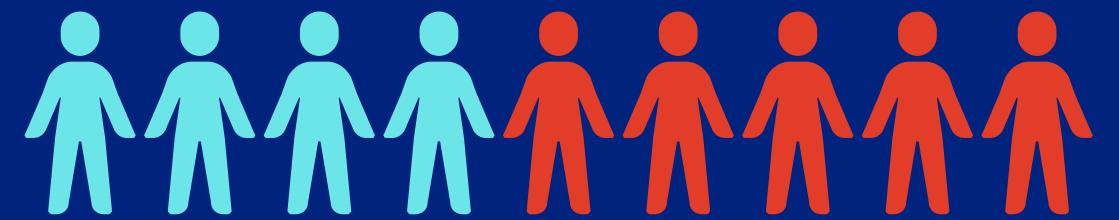
There are two educational systems in place to create a TTM workforce, namely:

- 1.Study at institutions with Thai Traditional Medical Council (TTMC) certification and in health facilities from trained TTM instructors. As of March 28, 2023, there are 105 TTM institutes and licensed TTM health care facilities certified by TTMC and authorized to teach at least one branch of TTM under this training system.
- 2.University system there are two different types of universities operating under this education system: those offering a four-year bachelor's degree program in Thai traditional medicine (Bachelor of Thai Traditional Medicine, B. TM.) and those offering a four-year bachelor's degree program in applied Thai traditional medicine (Bachelor of Applied Thai Traditional Medicine, B. ATM.).

CURRENTLY, THERE ARE 24 AND 11 TTMC-ACCREDITED EDUCATIONAL INSTITUTIONS, RESPECTIVELY, OFFERING THE B. TM. AND B.A. TM.



Number of Licensed TTM and Applied TTM doctors (the graduates from university system only)



APPLIED TTM DOCTORS: 4,556



TYPES OF TTM LICENSE



• THAI MIDWIFERY: 4,547 LICENSES

• THAI PHARMACY: 4,532 LICENSES

• THAI MEDICAL PRACTICE: 4.969 LICENSES



The Protection and Promotion of Thai Traditional Medicine Knowledge Act, B.E. 2542 (1999) was announced in the Royal Gazette on November 29, 1999. The key provisions of the Act include the protection of traditional medicinal formulas, medical manuscripts, and valuable medicinal plants for research purposes or economic value, and at risk of extinction, as well as their habitats.

The Department of Thai Traditional and Alternative Medicine provides support and supervision for the protection and promotion of traditional medical knowledge, in accordance with the three main aspects of traditional medical knowledge stated in the Protection and Promotion of Thai Traditional Medicine Knowledge Act, B.E.2542:

- 1. The protection of traditional medicinal formulas and manuscripts is categorized into three levels of protection according to Section 16 of the Protection and Promotion of Thai Traditional Medicine Knowledge Act, B.E. 2542.
- 2.Protection of medicinal plants is governed by the Act, which provides protection for medicinal plants that have research value, economic value, or are at risk of extinction. The Ministry regulation was issued to control medicinal plants and establishes criteria for possession.
- 3.The protection of medicinal plant habitats that serve as the origin of medicinal plants including both protected and non-protected areas. It also involves promoting and supporting private landowners to cultivate or develop medicinal plants.



This information is a part of tangible outputs of 5th Meeting of BIMSTEC Task Force on Traditional Medicine.

For more information:
Office of International Cooperation
Technical and Planning Division
Department of Thai Traditional and Alternative Medicine,
Ministry of Public Health, Thailand
E-mail: aseantradmed@gmail.com