

Traditional Complementary and Integrative Medicine

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World Health Organization (WHO) defines health “as a comprehensive state of physical, mental and social well-being and not merely the absence of disease or infirmity.” This includes physical, mental, social and spiritual dimensions of health. The concept of “One world One Health” is one of the strategies which evolve around the optimization of the health of the people⁽¹⁾.

WHO in 1978 launched the concept of ‘Health for All’ to permit all people to lead socially and economically productive life. It mentioned that the member countries, should utilize to their ancient medical resources for attaining this by the year 2000⁽²⁾.

Conventional medicine, also known as modern medicine/allopathic medicine/mainstream medicine is highly dependent on technologies that are expensive, and at times may not be giving the expected output. In its process of seeking for the solution, it has drifted away from the holistic and simple methods such as relaxation training and dietary advice that may be useful, effective and used in many alternative systems of medicine. With other methods of medicine, patients feel in more control of their disease⁽³⁾.

Traditional medicine is the knowledge, practices and skills acquired together from various beliefs, theories, various traditions and cultures used for the prevention, promotion and maintenance of mental as well as physical health. Ayurveda, Traditional Chinese medicine and Korean medicine, Kampo, and Unani methods of medicine uses natural products in promoting health and preventing disease and have been used in many parts of the world for many centuries⁽⁴⁾. It is recognised since past few decades. There is an increasing interest in traditional medicines across the world due religious as well as social acceptability, availability flexibility, and due to lack of adverse effects and inexpensiveness.

In large parts of Latin America, Asia, and Africa, traditional medicine is widely used. India is birth place of one of the methods of Medicine, Ayurveda. It is the oldest [more than 5000 Before Christ (BC) years ago] and better organized ancient health care stream which includes both, prophylactic

as well as therapeutic procedures. The meaning of the word ‘Ayurveda’ is ‘the science about life’. The *Charak* (father of medicine) *Samhita* and *Sushrut* (father of surgery) *Samhita* (100–500 BC) are the two ancient texts which provide the detailed classification of pharmacological and therapeutic properties of more than 700 medicinal plants. Siddha system of medicine was originated in Southern part of India. It dates back between 3000 Before Common Era (BCE)–2000 BCE. The basis for Unani system was laid down by the Hippocrates; it was later developed by Galen. Unani system was introduced in Indian system by the Arabs and Persians between 1000–1100 Anno Domini (AD)⁽⁵⁾.

Across the globe, traditional medicine may be an alternative in which the curative services and preventive care services are balanced out and it is a choice, offered by people-centred, adequately-functioning health system which integrated system of health care.

Complementary medicine refers to practices of health care that is originally not a part of country’s traditional system and hence is not fully integrated into the mainstream system of health care. Traditional and complementary medicine can provide substantial contribution in achieving the goal of Universal Health Care. It includes ancient system of Ayurveda and Yoga, Chinese medicine, other traditional systems of medicine, meditative movements-Taichi, nutritional supplements, herbal medicines, and hypnosis practices.

Integrative medicine is well-defined as the practice of medicine that not only focuses on the practitioner - patient relationship, but also emphasizes on the holistic health. The integrative medicine is supported by gathered evidence. It utilizes appropriate lifestyle practices, therapeutic disciplines and health care professionals to achieve healing and regaining/maintaining optimum health. The need for integration of conventional medicine with traditional, complementary, and alternative medicine is increasing. Many countries have integrated their traditional medicine into national health care delivery model. By accepting the diverse tradition in healing practices, we can create an

equitable and inclusive system of healthcare that respects the knowledge as well as the wisdom of different cultures gained through various experiments, traditions and societies⁽¹⁾. This concept is now referred as Traditional, Complementary and Integrative Medicine (TCIM) by the World Health Organization⁽⁶⁾.

Sharing practices in TCIM across various countries can lead to cross-cultural understanding, leading to a culturally sensitive and inclusive approach to healthcare. By integrating TCIM into mainstream healthcare, we can promote accessibility, affordability and improved outcomes of health⁽¹⁾.

It would be beneficial for the prevention and treatment of not only communicable but also chronic diseases which are related to behaviour and lifestyle so that an effective medical umbrella of care can be provided⁽⁶⁾. In the treatment of chronic pain, medications fail to address the emotional and cognitive component of the pain. The alternative therapies like pain counseling, physical and cognitive behavioural therapy, behavioural management, hypnosis, acupuncture and biofeedback are effective therapies. Traditional and Complementary Medicine (T&CM) are used most often for many chronic disorders, it is both inexpensive and patient oriented⁽⁷⁾. Many users of T&CM find these health care alternatives to be aligned with their value and belief system towards health and disease⁽⁸⁾. Some 40% of pharmaceutical products used in current era are derived from natural extracts⁽⁴⁾. In 1805, the first pharmacologically-active compound “morphine” was isolated from the opium. Thereafter, many active compounds have been extracted from natural resources. Drugs like artemisinin is derived from quinghasou, aspirin is based on formulations based on bark of willow tree. Cinchona bark was used for the treatment of malaria it led to the isolation of quinine. Based on the structure of quinine other analogues have been synthesized e.g. mefloquine, chloroquine, primaquine etc. Contraceptives were developed from roots of yam plants and cancer drugs are extracted from periwinkle plant⁽⁹⁾. Roots of Rauwolfia serpentina are used for hypertension⁽¹⁰⁾.

In the era of modern technology, process such as chemical synthesis, fermentation, pharmacodynamics—along with chemical diversity and biological variation, advances in evolutionary techniques along with a understanding of natural products, it will be possible to improve the success of individual treatment and prevention and control of diseases⁽⁴⁾.

One of the common challenges for integration is monitoring of safety of the traditional medicines. The modes as well as mechanism of action are seldom known. Safety analysis of TM is much more complex than conventional pharmaceuticals; therefore, it has become a concern for

regulatory bodies, purchasers, and practitioners. Another challenge is issues like origin of crude material, variations in handling techniques, various routes of administration, drug interaction, authentication, collection and labelling of plant material due to poorly developed taxonomy and documentation of herbal plants⁽¹¹⁾. Thus, there is a need for standardization of techniques, data on safety and efficacy. Post-marketing surveillance of drugs for timely identification of adverse reactions, herb to drug interaction is essential.

Newer research into Herbal medicines is undergoing to be incorporated into novice drug delivery methods. The implementation of these new approaches for traditional medicines will result in protection from Gastrointestinal (GI) degradation, sustained release action, increased bioavailability, decreased toxicity, which cannot be fully achieved using traditional drug delivery systems because of the poor solubility, large molecular size, and degradation of plant-based medicines in GI system. Ingredients such as terpenoids, flavonoids and tannins have shown higher bioavailability and precise effect at lower doses when administered via newer drug delivery systems⁽¹²⁾.

In India, the Ministry of Ayurveda, Yoga and Naturopathy, Unani, Siddha and Homeopathy (AYUSH) was formed in 2014 with a goal of rejuvenating the extensive knowledge of our ancient systems of medicine and to ensure the optimum utilization and propagation of the AYUSH systems for prevention of disease, promotion of health and cure for the disease. Pharmacovigilance programme for drugs has been established under the ministry of AYUSH^(4,5,13,14).

We respect the wisdom of our ancestors and acknowledge of ancient knowledge of medicine and its effect on the mankind in the present and its role in shaping our future. It is aligned with the Indian philosophy of “*Vasudhaiva Kutumbakam.*”

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References

1. Patwardhan B, Wieland L, Aginam O, et al. Evidence-based traditional medicine for transforming global health & wellbeing In. IJMR. 2023 August;158(2):101–105.
2. World Health Organization. The promotion and development of traditional medicine: report of a WHO meeting [yheld in Geneva from 28 November to 2 December 1977], Geneva; 2011. Available at:

- <https://www.who.int/publications/i/item/9241206225>. Accessed on 01 Jun 2024.
- Carr A. Integrated medicine. *BMJ*. 2001 Jun 16;322(7300):1484.
 - Yuan H, Ma Q, Ye L, Piao G. The traditional medicine and modern medicine from natural products. *Molecules*. 2016 Apr 29;21(5):559.
 - World Health Organization. WHO Traditional Medicine Strategy 2014-2023. 2013;1-76. Available at: http://apps.who.int/iris/bitstream/10665/92455/1/9789241506090_eng.pdf?ua=1. Accessed on 09 Sep 2016.
 - Seetharaman M, Krishnan G, Schneider RH. The future of medicine: Frontiers in integrative health and medicine. *Med*. 2021 Nov 28;57(12):1303.
 - Sreenivasan TM. Role of alternate medicines in total health care. *Anc Sci Life*. 1985 Apr 1;4(4):191-6.
 - Thomas DA, Maslin B, Legler A, Springer E, Asgerally A, Vadivelu N. Role of Alternative Therapies for Chronic Pain Syndromes. *Curr Pain Headache Rep*. 2016;20(5):1-7.
 - Abheiden H, Teut M, Berghöfer A. Predictors of the use and approval of CAM: results from the German General Social Survey (ALLBUS). *BMC Complement Med Ther*. 2020 Dec;20(1):1-11.
 - Lobay D. Rauwolfia in the treatment of hypertension. *Integrative Medicine: A Clinician's Journal*. 2015 Jun;14(3):40.
 - World Health Organization. Traditional medicine has a long history of contributing to conventional medicine and continues to hold promise. Available at: <https://www.who.int/news-room/feature-stories/detail/traditional-medicine-has-a-long-history-of-contributing-to-conventional-medicine-and-continues-to-hold-promise>. Accessed on 08 Jun 2024.
 - Zhang L, Yan J, Liu X, et al. Pharmacovigilance practice and risk control of Traditional Chinese Medicine drugs in China: Current status and future perspective. *J Ethnopharmacol*. 2012 Apr 10;140(3):519-25.
 - Saggar S, Mir PA, Kumar N, Chawla A, Uppal J, Kaur A. Traditional and Herbal Medicines: Opportunities and Challenges. *Pharmacognosy Res*. 2022;14(2):107-14.
 - Ministry of Ayush. Government of India. A Decade of Transformative Growth in AYUSH Towards Holistic Health for all, 2014-2024. 2024. Available at: <https://ayush.gov.in/images/annualReport/DecadeAyushReport.pdf>. Accessed on 10 Jun 2024.