SCOPE AND CHALLENGES OF THE BHUTANESE TRADITIONAL MEDICINE IN THE 21^{ST} CENTURY

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Introduction

Traditional medical systems or alternative medicine in various forms has been in use for centuries. Although there has been a slight decline in the popularity of alternative medicine in some countries, over the last decade, there has been an increasing use of complimentary and alternative medicines in many developed and underdeveloped countries. In China, the traditional medicine accounts for 40%, in Chile 71%, in Colombia 41%, in India 65%, in UK 70%, and in Ireland about 90% (Karan, 2004). Overall traditional medicine provides primary healthcare services for 65-85% of the world's population (Wangchuk, 2004).

The healthcare system in Bhutan comprises of modern and traditional system which are integrated and housed under the same roof. The traditional medical system, *gSo-ba Rig-pa*, was formally introduced into the healthcare system in 1967. This traditional medical system is a conglomeration of science, philosophy and religion that blend culture and tradition, in which Buddhism is the prevailing influence. Health and spirituality are inseparable and together they reveal the true origin of any sickness. This art of healing is therefore a holistic healthcare approach.

As per the traditional medicine system, the close relationship between Man and Nature is reflected in the knowledge of the five elements (Air, Fire, Water, Earth and Space/Ether) and the three-principles/vital energies elements viz. Air, Bile and Phlegm commonly known as *rLung*, *mKhris-pa* and *Bad-kan* respectively. The five elements have certain properties that are connected with their physical properties. *rLung* is responsible for respiration, movement of hollow organs such as intestine, lungs, heart and blood vessels. *mKhris-pa* stimulates appetite, helps in digestion and maintains body temperature. It also claims to confer bravery, wisdom, and desire or ambition. *Bad-kan* sustains body and produces sleep. It is responsible for movement of joints, muscles and confers patience. Its aqueous element is associated with bodily fluids. If these three principles are in a harmonious balance, then one is healthy. An imbalance in any of these principles leads to a disorder that can be manifested as a disease.

The *gSo-ba Rig-pa* provides a comprehensive way of understanding the Universe, man, and his sicknesses and it is gaining popularity due to its holistic, rounded and profound approach in the treatment of human beings.

The Bhutanese traditional medicine (TM) has lots of scope but faces a number of challenges in the 21st century in the era of modern science and technology.

Scope of Bhutanese TM

Although the Bhutanese TM, like other alternative medicines, faces a number of limitations and challenges in the 21st century, it has a lot of scope, some of which can be listed as under:

a. Holistic healthcare approach

The TM system with its unique philosophy and approach has a holistic approach in the treatment of human suffering and diseases. It not only considers in treating the disease and its causes but also considers the interdependency of man and nature and has spiritual component included in the treatment. This system of healthcare is becoming meaningful in today's world where the human suffering has not ceased to exist in spite of the highly advanced medical technologies and medicines.

b. Integrated healthcare system, a national healthcare policy

The traditional medical service in Bhutan is provided through the same window with the modern medical system of healthcare. This integration of modern and traditional medical system not only provides a choice to the people but also promotes better results in public health in a harmonious manner. As this ancient system of healing has much linkage with Buddhism, it has helped to strengthen the modern system through inclusion of religious components such as compassion and love in the practice of modern medical healthcare system. Focus is given to preserve the traditional practices by providing an alternative healthcare service to the people in line with the country's noble development philosophy of Gross National Happiness.

c. Local production of traditional medicines and manpower

The traditional medicines required for the healthcare are produced within the country using modern science and technology. To improve patient compliance, suitable dosage forms such as tablet, capsule, pills, powder, syrup, ointment, medicated oil, fermented mix and hot compression have been devised. The human resources for TM services are also produced within the country. Since most of the medicinal raw materials are available within the country and human resource trained in the country, the TM system is one of the most sustainable systems of healthcare in Bhutan.

d. Preservation of culture and identity

The TM system is very much linked with the Buddhist philosophy and therefore embedded in the Bhutanese culture and tradition. It not only provides a choice of treatment to the people but also promotes the identity of the Bhutanese people. The policy for traditional medicine is to preserve and promote this unique system of medicine that is based on rich culture and tradition by establishing an effective system within the framework of national healthcare delivery system.

e. Harmonious marriage with the concepts of modern healthcare approaches

To rationalize the utilization of the medicines for sustainability, the modern concepts of the essential drugs and rational use have been introduced in the traditional healthcare system. The list of essential medicines is drawn up and reviewed from time to time in line with the morbidity and epidemiological patterns as well as availability of natural resources in the country. This system promotes a sustainable TM care and services in the long run.

f. Management of natural resources

Evolving over a long period of time based on necessities and experiences, indigenous medical knowledge has played an important role in natural resource conservation. Through the provision of TM care, awareness and focus on medicinal plants is promoted and development activities geared towards their sustainable management. Community based sustainable management of

medicinal plants is established and some species are domesticated for cultivation in collaboration with the Medicinal and Aromatic Plants Division of the Ministry of Agriculture. Enrichment activities are carried out for the rare and endangered species. Farmers/collectors are provided training on sustainable collection and post harvest care to minimize wastages and promote sustainable harvesting while ensuring the quality of the medicinal plants. Thus the provision of TM care helps in the management of the natural resources.

g. Scope for research and development

Traditional medicines has vast knowledge and wisdom and research on TM has a great potential in discovering new drugs and understanding new mechanisms of drug action like additive and synergistic effects of the multi-ingredient compounds. Research has shown that traditional medical formulations are not just hypothetical and theoretical assumptions but founded on the empirical based sciences. In fact many drugs that are used today in treating life threatening diseases have been discovered through research starting from the indigenous knowledge and practices.

Through research one can learn to formulate the remedies for the prevailing diseases and explore remedies for the emerging diseases. Herbal products can be developed based on traditional medical knowledge to generate revenue to sustain the TM services. Product development will also help to promote income generation for local communities through their engagement in the collection of medicinal raw materials and marketing of herbal products.

Challenges of TM

While the Bhutanese TM system has a lot of opportunities to harness under the strong support of the Government, it is also increasingly facing a number of challenges in today's modern age of science and technology.

a. Poor documentation of scientific evidence

In spite of all that traditional medicine has to offer to the healthcare system, there is a need to do a lot of research to improve scientific evidence and convince the scientific community. Although the healing system has been practiced for centuries and its efficacy and safety established over centuries, little documentation is available on evidence of therapeutic claims and properties of many formulations used in the system. Difficulties are faced in defining quality and efficacy of traditional remedies due to their complex/multi-ingredient nature.

b. Challenges and complexities in research

Research on traditional medicines is resource intensive, time consuming and complex due to their multi-ingredient formulations. Today, research on traditional medicines has become increasingly important as the drug regulatory authorities in different countries are introducing stringent regulatory norms and mechanisms which even threaten the existence of the traditional medicine system.

c. Sustainability of raw materials

Most of the traditional medicines are composed of natural resources such as plants and animals. The sustainability of raw materials will be at stake with increasing demand for traditional medicines. Overexploitation of the natural resources could lead to the depletion and extinction of certain species of medicinal plants. Domestication and cultivation trials although initiated are faced with greater challenges due to the specific soil and climatic conditions under which most of the medicinal plants grow.

d. Global trends and challenges

There is a danger of the traditional medicines losing grounds to modern medicine due to its limited scientific evidence and documentation. Unless appropriate measures are adopted there is a risk of losing its scope over time as the younger generation is not well informed on its benefits, and belief and tradition play a greater role in its practice and care.

e. Patenting and IPR issues

It is very difficult to patent the traditional medicines as the knowledge belongs to the community. Patenting requires infrastructure and legal framework and facilities and the cost is high. There are chances of losing its knowledge, significance and role in the healthcare with more pressure and western influence.

Conclusion

Given the scope and challenges as described above, it is felt that the Bhutanese TM has a lot to offer to the healthcare system but it needs to adopt appropriate measures and strategies to move forward with time in the modern age. There is a need to strengthen the research to improve documentation of evidence and harness opportunities. Research is the way forward and a hope for the future of the traditional medicines in Bhutan. It is only through research that the quality and safety of medicines can be ensured. Appropriate measures need to be put in place to promote the sustainability of natural resources in the long run.

Strengthening the integration between modern and ancient philosophies and promoting synergy between the modern and traditional healthcare systems could be a way forward in the 21st century.

References

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