

Primary Health Care and Traditional Medicine: A Review of Views and Obstacles

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Abstract: Traditional, complementary, and alternative medicine (TCAM) has recently attracted more attention for its potential benefits to public health in both industrialized and developing nations. Among traditional medicine's many advantages are its adaptability, diversity, accessibility, widespread and ongoing acceptance in developing nations and rising popularity in developed nations, relative cheap cost, low levels of technological input, relative lack of side effects, and expanding economic significance (WHO 2002). To reach the goal of better access to healthcare facilities, it is essential to include traditional medicine into public health care in this setting. Nevertheless, there seems to be a discrepancy between the public's individual decisions about the integration of various medical systems and the creation and execution of TCAM policies. Safety, effectiveness, quality, and rational use of traditional medicine are among the key policy problems identified by the World Health Organization (WHO)

In this context, the article provides a synopsis of TCAM, including its worldwide reach, the many legislative initiatives aimed at promoting it, its function in primary health care, and the most pressing modern obstacles to its incorporation into public health.

1. An Overview of Traditional Systems of Medicine

According to World Health Organization (2002: 7), "Traditional medicine refers to health practices, approaches, knowledge and beliefs incorporating plant, animal and mineral based medicines, spiritual therapies, manual techniques and exercises, applied singularly or in combination to treat, diagnose and prevent illnesses or maintain well-being." Further the term 'complementary' and 'alternative' medicine (and sometimes also non-conventional or parallel) are used to refer to a broad set of healthcare practices that are not part of country's own tradition, or not integrated into the dominant healthcare system. Based on this broad definition it may be hard to find a region without some form of TCAM practice. As per the context in which it is practiced or the form of knowledge, often it is called in various ways such as traditional medicine, alternative medicine, complementary medicine, natural medicine, herbal medicine, phyto-

1) World Health Report 2006—<http://www.who.int/whr/2006/en/> accessed on 28th August 2009.

medicine, non-conventional medicine, indigenous medicine, folk medicine, ethno medicine etc. Chinese medicine, Ayurveda, Herbal medicine, Siddha, Unani, Kampo, Jamu, Thai, Homeopathy, Acupuncture, Chiropractic, Osteopathy, bone-setting, spiritual therapies, are some of the popular, established systems.

Several classifications have been attempted for defining and classifying traditional medicine. It is pointed that there is no homogenous body of medical thought and practice which can be put under one name (Van der geest 1997, Patwardhan 2005)²⁾. WHO strategy (2002: 8) also makes a similar remark that the term 'alternative' refer to large heterogeneous categories defined by what they are not than what they are.

Whereas there is wide diversity at a practical level, a basic philosophical underpinning of all such knowledge systems is their acceptance of a shared worldview which is an inherent relationship and sharing of key elements between the macro and microcosm—the outside universe and a living being. Few other common dimensions are ecological centeredness, focus on 'non-material' or 'non-physical' dimensions, and a comprehensive approach to health, keeping in mind physical, mental, social, emotional, spiritual, ecological factors in wellbeing. Citing the African traditional medicine situation, Van der Geest et al. (1997) points out some of the key unifying features of any traditional medical knowledge as, popular and public domain knowledge relating to self help; a social character; religious dimension; orientation to prevention; and comprehensive concepts of health and illness than in the Western tradition. Further, one can see broad similarities at the theoretical level of traditional medicines such as their focus on functional aspects of health and diseases; systemic understanding of health and disease; multi causality approach; a circular method of cause-effect reasoning; subjective, qualitative, individualized and personalized management; preventive focus; attribution of importance to physician's wisdom; etc. Knowledge generation is mostly through subtle observations and experiences within the context i.e. an individual or the nature (Unnikrishnan 2009). Some of these defining features have key policy implications today.

Forms of Traditional Medical Knowledge

In countries such as India, China and many other parts of Asia one can observe traditional medical knowledge in various forms such as codified medical systems, folk systems, allied disciplines and new systems of knowledge.

Codified Medical Systems

These are also known as great traditions. Ayurveda, Siddha and Unani medical systems in Indian subcontinent or Traditional Chinese medicine and Acupuncture in China, have evolved in a historical period spanning over 3—4 millennia with their own unique worldviews, conceptual, theoretical frameworks and elaborate codified literature. For example the oldest medical text of Ayurveda, Caraka samhita is estimated to be written and redacted through various versions from 1,500 BC—200 AD. Such codified medical traditions have unique understanding of physiology, pathogenesis, pharmacology and pharmaceuticals, which is different from Western biomedicine³⁾. These medical systems have been professionalized since last millennia and have been integrated into the national health programs. For instance in India, there is a Central Council for Indian Medicine and there are national institutes for each of the six systems of medicine. The education system is well developed with over 300 university level programs across the country. Around 600,000

2) According to Patwardhan (2005), "historically, terms alternative, complementary or traditional medicine all referred to a genre of health care practices or services that got bound together as a class through the logic of reductio-ad-absurdum, defined by a criteria of 'absence from the mainframe of ' what has come to be known as modern medicine."

3) In Ayurveda there are different specialty areas such as *kaya cikitsa* (general medicine), *bala cikitsa* (paediatrics), *graha cikitsa* (psychiatry), *urdhvanga cikitsa* (ENT and eye), *salya cikitsa* (surgery), *damstra cikitsa* (toxicology), *jara cikitsa* (rejuvenation) and *vajikarana cikitsa* (sexual and reproductive health) each with unique taxonomy of health and disease.

licensed practitioners are registered under the Indian Medicine Practitioners Act and there are over 9,000 licensed TCAM industries in the country⁴⁾. There is a central research authority with research and development programs on several aspects and the education and practice are regulated under the Indian Medicine Central Council Act 1970.

Folk Medicine

The folk knowledge traditions which are mostly orally transmitted, are more diverse, ecosystem and ethnic community specific with household level health practices (home remedies for primary health care, food recipes, rituals, customs), specialized healing traditions like bone setting, poison healers, birth attendants, veterinary healers, general healers etc. These are generated over centuries by communities and use components of ecosystems (plants, animal and mineral/metal derivatives) that are primarily locally available, easily accessible and often cost effective. It varies hugely owing to social, ecological and historical circumstances. Hence, countries with similar ecosystems are often found to nurture similar health practices indicating the strong linkages between environment and health. These are also known as indigenous medicine, ethno medicine, bush medicine, little traditions etc. In most countries where traditional medicine is not formalized, it largely remains in the non-codified folk knowledge form. Diversity, collective ownership guided by customary laws, adaptability to changing contexts and oral transmission are some of the prominent characteristics of this knowledge. Unlike common understanding, it is highly dynamic thus contemporary and not pertaining to a period in time. While knowledge generation and transmission might vary with cultures, there are several similarities in the value systems and modes of transmission of knowledge among communities. Often it is not recognized as 'valid knowledge' by scientists as it is combined with beliefs and values.

Allied Forms of Health Knowledge

There are allied forms of health knowledge such as yoga, tai-chi, qigong, kalari, judo-seifuku, various forms of meditations, breathing techniques, massage techniques, among many others which are related to wellbeing. Though these are not purely medical systems they have been adapted as health applications and contribute to health sector immensely.

New Forms of Alternative Health Knowledge

There is also new knowledge generated in the west and other developed countries with a mix of ancient and contemporary scientific knowledge such as phyto-medicine, health supplements and macrobiotics among many others which are of relatively recent origin. There are other therapies such as reiki or shiatsu (the term and form as it is practiced today) which are of 20th century origin. Often some of these are also a blend of one or more of older medical knowledge systems. Some consider homeopathy and chiropractic systems not as traditional medical systems as they were developed in Europe post 18th century after the introduction of modern medicine (WHO 2002). Many other new forms of TCAM therapies can be grouped under this category. Since some of the new forms of alternative health knowledge are often guided by modern knowledge issues related to their acceptance may be different.

Classification and Their Policy Significance

Such categorizations are useful as analytical frameworks to understand the historical path, popularity or acceptance and various policy initiatives of TCAM in both developed and developing countries. This also helps to analyze trends such as standardization, institutionalization and globalization of TCAM. While codified medical traditions have been formalized to a great extent in Asia and command good attention in respective national policies, folk or oral knowledge or the allied disciplines do not receive much attention and often face a contemptuous treatment from the codified systems. Similarly new forms of knowledge though may be recognized and regulated in the country of its

4) AYUSH department, Government of India—<http://indianmedicine.nic.in/> accessed on 28th August 2009.

origin, continues to be unrecognized elsewhere. Codified forms of knowledge like acupuncture, ayurveda, and Chinese medicine, popularized in developed countries today seem to be commanding better attention due to their popularity and integration in health system in places of its origin. The recent term 'alternative' generally used in developed countries indicates a practice which does not fall under the realm of conventional medicine and the word 'complementary' refers to a medical practice which is used along with conventional medicine but has not been integrated into the formal health system. In such a perspective what is considered complementary or alternative in one country may be a mainstream practice in another.

Regulation, education, public funding, and research funding are all components of TCAM policies that many nations are working to establish (WHO 2002). Traditional Chinese Medicine (TCM), Ayurveda (Indian traditional medicine), Mind-Body medicine (Chinese medicine), Biologically Based Practices (herbs, food, vitamins), Manipulative and Body-Based Practices (chiropractic, osteopathy), and Energy Medicine (bio field therapies) are the five main categories into which TCAM therapies are classified according to the clinical approach. Therapy in the UK has also been divided into three categories by a panel of the House of Lords: complementary treatments, alternative therapies, and professionally organized alternative therapies. The report has highlighted self-regulation as an important strategy for TCAM. Additionally, the European Union has made efforts to promote TCAM. In a similar vein, the White House established an alternative medicine panel to advise the president on administrative and legislative measures to increase the effectiveness of TCAM. One more technique, "integrated medicine," is typically thought of as the ideal strategy for promoting TCAM⁶. It refers to evidence-based care that uses the best of both conventional and alternative medicine in combination. A willingness to learn about the pros and cons of allopathic medicine is required, as is an acceptance that scientific knowledge cannot possibly address the myriad of complexities that patients face (Snyderman and Weil, 2002).

TCAM Practitioners

Today practitioners of TCAM can be classified as practitioners such as folk healers with no formal institutional training as in many developing countries; TCAM practitioners trained through short term courses as in Europe, USA and many other countries; TCAM practitioners with university level formal education equivalent to allopathy as in South Asia traditions of Ayurveda, Siddha, Unani medicine; and allopaths practicing TCAM as in Japan and China.

Patterns of Usage of TCAM and Their Reasons

Around 80% of the population continues to use traditional medicine in Africa, Asia and Latin America and many governments in these regions have incorporated traditional medicine practices to help meet their primary health care needs. In industrialized countries, almost half the population now regularly use some form of TCAM (United States, 42%; Australia, 48%; France, 49%; Canada, 70%), and considerable use exists in many developing countries (China, 40%; India, 70%; Chile, 71%; Colombia, 40%; up to 80% in African countries) (Bodeker and Kronenberg 2002, WHO 2002).

5) The terms Conventional medicine, Allopathy, Western bio-medicine are used in this article to mean modern, western medical system.

6) See Snyderman and Weil, 2002, Some of the important principles of integrative medicine are a good physician-patient relationship with physician's role as a healer, preventive maintenance of health by attention to all relative components of lifestyle, diet, exercise, stress management and emotional well being, natural and minimally invasive management methods.

Table 1 Usage of TCAM in Developing and Developed Countries

Developing Country	Usage of CAM
Uganda	60%
Tanzania	60 %
Rwanda	70%
India	70%
Benin	80%
Ethiopia	90%

Developed Country	Usage of CAM
Belgium	31%
USA	42%
Australia	48%
France	49%
Canada	70%

Source: WHO Traditional Medicine Strategy 2002—2005, World Health Organization, Geneva

High per capita distribution of TCAM practitioners in developing countries is an important reason for the widespread use of TCAM. WHO report cites example of Uganda, Tanzania and Zambia where the ratio between populations to healer is 1:200 to 1:400 while the ratio of allopathic practitioners to population is 1:20,000. In India, according to government sources, for the 65% of population traditional medicine is the only available source of healthcare (WHO 2002: 13). It is also an affordable source of health in many countries. Another reason is that it is firmly embedded in the belief systems and can be termed 'culturally compatible.' In developed countries higher income and higher education are guiding factors of patient preference for traditional medicine. Due to difficulties in accessing modern health care, ethnic minorities in developed societies who are disadvantaged both economically and socially, use TCAM as a first health care choice, making it non complementary (Bodeker et al. 2007).

Increase of chronic diseases, awareness about limitation of modern medicine, proven efficacy of TCAM systems in selected conditions, emerging interest in holistic preventive health, integrated approach to medical education and increasing awareness among physicians are some of the reasons for renewed interest in traditional medicine⁷⁾. Higher quality of care by TCAM practitioners has also been reported as an important reason for increasing health seeking and consumer satisfaction of TCAM.

Within developing countries one can see a divergence of reasons in rural and urban trends in the health seeking behaviour. While accessibility, availability, cost are important aspects in rural areas, limitations of conventional medicine, concerns about chemical drugs, questionable assumptions of allopathic medicine, greater public access to information, changing values and reduced tolerance for paternalism, fitness and ecological consciousness etc., are reasons for accessing TCAM (WHO 2002: 14) in urban areas as in developed countries. Thus in emerging economies like China and India where there is a huge gap between the urban centres and rural areas proactive policies on TCAM will have an impact across population.

7) Few other reasons cited are emerging trends of post modernity, renewed interest in diversity of choices and ecological concerns, increased access of native systems by ethnic minorities in developed countries, emerging system biology approaches, customized care, body-mind medicine and economic factors.

Public Financing

According to the WHO global atlas, of the 213 member states only 27% have any form of public financing of TCAM. A majority of this relates to service provision rather than research. In selected countries such as Cuba, Russian federation, the United Kingdom and Vietnam have adopted a 'national health service' model in which those eligible do not pay and it is covered by the government. Many other countries including USA, EU, Japan, Republic of Korea, Australia and New Zealand have a partial coverage for selected therapies or drugs. Some other countries such as China, Denmark have combined systems (Bodeker et al. 2007: 41). In many developing countries, local healers subsidize the costs for patients who cannot pay and goes unaccounted for in official statistics. Out of the pocket CAM expenditure is significant and is rapidly growing. For instance, the estimated figures are: Malaysia—US \$500 million, USA —2,700 million (1997), Australia—80 million, Canada—2,400 million and United Kingdom—2,300 million (WHO 2002). Comparative studies of cost-effectiveness of allopathy and TCAM would enable informed decisions on public financing of medical practices.

Policy Measures

The WHO's traditional medicine strategy of 2002—2005 highlights some urgent needs such as national policy and regulation for safety, efficacy and quality, access and rational use of traditional medicines. Only 66 countries out of 213 WHO member states have traditional medicine policies, while around 43 states have some kind of legislation and 20 member states are in the process of establishing some regulatory policies (Bodeker et al. 2007). Key elements suggested in a national policy are definition of TCAM, definition of governments' role in developing TCAM, provision of safety and quality assurance for therapies and products, legislation relating to TCAM providers, provision of education and training, promotion of proper/rational use, provision of capacity building for human resources including allocation of financial resources, provision of coverage by public health insurance and consideration of intellectual property right issues. However, for most countries, data related to pattern, modalities and outcomes of traditional medicine usage are not recorded⁸⁾. In many developed countries though there are strict regulations for usage of traditional medicine, there is a growing trend of traditional medicine use in the guise of 'health supplements' and spas. Increased adoption of national policies would facilitate creation of internationally accepted norms and standards for research into safety and efficacy of TCAM, rational use, sustainable usage of natural resources and protection and equitable use of knowledge of traditional medicine.

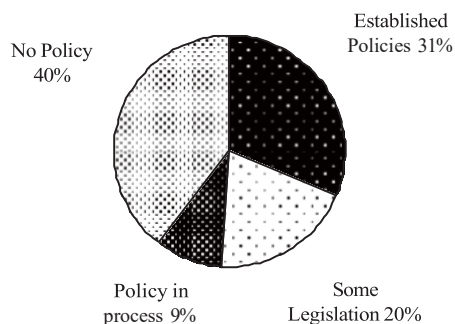
Countries such as India and China have purposively sought to develop the traditional medicine sector in order to strengthen their traditional medical heritage and at the same time also enable cost-efficacy in health care delivery to their people. It is also a response to capitalize on the economic opportunity arising from an increasing global demand for herbal products (Bodeker and Budford 2007). However in India, until recently, the fact and vast presence of folk medical stream was unrecognized in official policy indicating an alienation from ground realities⁹⁾.

Currently in many countries there exists a contradiction between personal choices and public policies with respect to health care involving traditional medicines. While on the one hand the public at large actively integrate various health systems for a variety of reasons such as access, cost, efficacy, convenience, ethical and moral reasons, the policy and institutional mechanisms are slow to address various issues related to such integration. Van der Geest et al. (1990)

8) This refers to who seeks traditional health service, how is it sought and delivered, type of transactions, costs involved in transactions and the effects of using traditional medicines and services.

9) In the National Policy on Indian Systems of Medicine & Homoeopathy of 2002, folk healing or local health traditions was recognized for the first time—http://www.whoindia.org/LinkFiles/AYUSH_NPolicy-ISM&H-Homeopathy.pdf.

Figure 1 Status of TCAM Policies in WHO Member Countries



Data source: Bodeker et al. 2007

suggest that research into opinions and practices concerning traditional medicine and health care at different levels of social integration will doubtlessly lead to more policy relevant conclusions.

Economic Importance

World market of herbal medicine based on traditional medicine is estimated at US \$60 billion (WHO 2002) and it is steadily growing. The global wellness spa industry which is vastly based on TCAM is valued at \$255 billion annually (Cohen and Bodeker 2008). Many of the major modern drugs such as quinine, salicylic acid, artemisinin have been discovered from folk knowledge¹⁰). According to NAPRALERT database of the University of Illinois, Chicago¹¹), 74% of the 119 pure compound based modern drugs derived from plants have been based on leads provided by traditional medical knowledge and the modern applications are similar to the traditional ones (Farnsworth 1988: 95). As the economic importance of traditional knowledge and medicinal plants based products and services are growing they provide employment opportunities to various sections of people. At the same time it raises concerns about availability of medicinal plants, increasing costs of herbal products in domestic market especially for marginalized population and a dilution of classical practices.

2. Traditional Medicine in Various World Regions

Although alternative forms of health care are prevalent in all regions of the world, there is only scant statistical data of their presence. Recently published WHO global atlas of traditional, complementary and alternative medicine is the first attempt to compile comprehensive information on traditional medicine globally in terms of policy, regulation, financing, education, research, practice and use (Bodeker et al. 2005). The publication explicitly states that it depended on secondary sources for the compilation due to lack of primary data in most member states.

According to a regional overview in the WHO *African region* (AFR) only 50% of the population has access to essential health care while 80% continue to rely on African traditional medicines (ATRM) including herbal medicine,

10) See also <http://www.ncbi.nlm.nih.gov/pubmed/1490916> (The Quinine connection), <http://www.ncbi.nlm.nih.gov/pubmed/18175528> (From the willow to aspirin), <http://www.ncbi.nlm.nih.gov/pubmed/18699744> (Artemisinin).

11) Natural Product Alert Database—<http://www.napralert.org/>.

spiritual therapies and manual therapies. Traditional medicine is largely transmitted as oral knowledge and around 4,000 species are used in ATRM which is predominantly (90%) plant based. Currently over half (56%) of the countries in the region have formulated traditional medicine policies and majority have established national departments in the health ministry and developed strategies for promotion. In 2001 a regional strategy for promoting ATRM was adopted following which at the World Health Assembly 2003 a resolution on ATRM was also passed. An ATRM day is observed for advocacy on August 31st each year among member countries and African summit of heads of state in 2001 declared 2001—2010 as ATRM decade. These initiatives have been supported by WHO and African summit of heads of state, especially for research and integration in the management of HIV/AIDS, tuberculosis, malaria and other infectious diseases. Self regulatory bodies such as healers associations have been established in many countries (Kasilo et al. 2005).

Latin American indigenous communities rely heavily on traditional medicine practitioners like herbalists, masseurs, bonesetters, and spiritual therapists. The Americas region, which includes 35 member states of the World Health Organization (WHO), is home to a large indigenous population and 60% of the world's biodiversity. The use of complementary and alternative medicine (CAM) practices such as massage, spiritual therapies, acupuncture, chiropractic, homeopathy, and herbal remedies is also on the rise. There are now health ministry divisions, institutions dedicated to traditional medicine research, and herbal product laws in several nations. Traditional medicine is not covered by insurance in most countries, and only Cuba and the United States provide university-level study. The Cuban national health system now incorporates TCAM. According to Gupta (2005), the Pan American Health Organization (PAHO) has been instrumental in promoting TCAM throughout the Americas.

Ayurveda, Siddha, Unani, Homeopathy, yoga, naturopathy, Tibetan, Jamu, Thai, and Koryo medicine are some of the most well-known medicinal systems in the South East Asian region (SEAR), in addition to the many folk medicine traditions. About seventy to eighty percent of people utilize TCAM. Following the establishment of national regulations, the majority of nations instituted mandatory registration of both trained and untrained practitioners. Nevertheless, many people who follow traditional practices do not register. In addition to national laws, departments, and research institutions, the majority of SEAR nations provide university-level TCAM programs. There is a lack of strong non-governmental self-regulation systems in the area. There has been some incorporation of TCAM into the public health systems of Sri Lanka, India, Nepal, and Thailand. It has been noted by Gaitonde and Kurup (2005) that while the Maldives and Indonesia have not yet included them into their healthcare systems, Nepal, the Democratic Republic of the Korea, and Bhutan have begun plans for integration. Despite widespread use, traditional medicine often goes unsupported in nations with robust codified knowledge systems.

The 51 member nations that make up the European Union (EUR) exhibit vastly different patterns of maternal and newborn mortality, morbidity, and life expectancy when compared to their Western counterparts. It is believed that in Eastern Europe, new interests in TCAM have arisen as a result of the loosening of societal restraints after the collapse of communism, in contrast to Western Europe, where the "green" lifestyle and new ideas about doctor-patient interactions are driving TCAM's resurrection. The European Parliament issued four requests for action in 1999: first, the formal recognition of TCAM and the establishment of suitable commissions; second, the creation of a safety, efficacy, and areas of applicability framework; third, the definition and classification of TCAM; fourth, the analysis of TCAM laws in different countries; and fifth, the advancement of TCAM-related basic and clinical research. Currently, several nations in the European Union are taking steps to legitimize TCAM practitioners by creating national ministries or authorities and instituting regulation and licensing systems. Only one nation, the United Kingdom, has a public hospital specifically for TCAM, or homeopathy. In almost half of the nations, there are self-regulatory organizations. According to Ong et al. (2005), there are significant differences in schooling and other areas of TCAM within the EUR region.

Popular knowledge, healers/oral traditions, codified systems, and traditional complementary and alternative medicine (TCM) treatments make up traditional medicine in the 22 member nations that make up the Eastern Mediterranean region (EMR). Beginning in 2003, EMR has worked on standards for the registration of herbal products as well as technical standards for the safety, effectiveness, and quality control of herbal medications. As an alternative to conventional treatment, many people turn to alternative techniques such as aromatherapy, chiropractic, osteopathy, naturopathy, spiritual therapy, reflexology, Ayurveda, homeopathy, Chinese medicine, Unani, and other forms of

traditional Indian medicine. Consequently, there is a wide range in the systems that are in use, the factors that influence public choice, and the level of government endorsement and acknowledgment (El-Gendy 2005). In the Western Pacific region (WPR), two nations are currently working on national policy, while eighteen have already done so. Japan and the Republic of Korea only cover a subset of traditional medical procedures, in contrast to nations like Vietnam and China where all of it is covered by insurance. Public funding for TCAM is nonexistent in several of the region's nations. There are four types of traditional medicine practitioners in the area. One type has training in both allopathic and traditional medicine. Another type has training in traditional Chinese medicine (TCM) and some allopathic knowledge. A fourth type has training in TCM alone. A fifth type has no formal training or credentials, but still practices traditional medicine, such as folk healers or birth attendants. Formal university education for TCAM is available in several countries in the area. The development of a regional plan to promote TCAM was completed in 2005 (Roh). Almost eighty-nine percent of Japan's medical schools now teach kampo medicine, and 72 percent of Japanese physicians regularly practice it (Imanishi et al. 1999: 1735). The existing usage data is imprecise and nonexistent in almost all locations. There is a lack of data about patient choice, user demographics and socioeconomic status, usage economics, and safety reporting. While there are official university programs for TCAM in places like SEAR and WPR, informal education is the norm in other areas. Even in the regulatory processes, there is a noticeable difference. While TCAM is controlled by the government in other areas, self-regulation seems to be more common in AFR, AMR, and EUR. How successful are these self-regulation strategies? That is a valid concern. Information on practitioners who are not registered is entirely lacking in the majority of areas. This problem demands urgent attention since it involves a crucial resource for primary health care in places like SEAR, EMR, and AMR. It is a true contradiction. The drive to standardize systems and create uniformity in some locations is another notable trait, with the approach frequently derided as "biomedicalization" being used to achieve this goal. Keeping TCAM's variety alive is quite difficult because of this. Finally, greater in-depth investigation is required into the role and support of community and civil society organizations in promoting and integrating TCAM, which is clear in all areas.

3. Multilateral Policies and Promotional Initiatives

Over the past three decades, WHO has produced several policy documents on TCAM relating to their promotion and development, regulation, guidelines and standards for safety, efficacy, good manufacturing, research, assessment, clinical trials, rational use, training of health practitioners, standardization of terminologies in specific disciplines such as acupuncture, relevance in HIV/AIDS, consumer information, good agricultural practices, safety monitoring, conservation of natural resources, intellectual property rights and so on. The first atlas of TCAM outlining the status of these policies in various member states was published by WHO Kobe centre in 2005. There are 19 WHO collaborating centres of traditional medicine working various research and development areas of which seven are located in China.

Apart from this, TCAM sector is receiving increasing policy support now from other multilateral organizations as well. In a United Nations Environment Program (UNEP) conceptual framework on poverty and ecosystem, ability to use traditional medicine is one of the 10 resources of wellbeing (Janska 2005: 4). The Convention on International Trade in Endangered Species of Flora and Fauna (CITES) under UNEP has promoted sustainable use of natural resources by

monitoring trade of endangered species of flora and fauna. The Food and Agriculture Organization (FAO) has developed many policy resources on non-timber forest produce including medicinal plants pertinent to policy, conservation and research. The UN conference on Trade and Development (UNCTAD) is involved in protection of traditional knowledge and also promoting trade and development opportunities for developing countries through traditional medicine. The UN Industrial Development Organization (UNIDO) has been recommending support for industrial use of medicinal plants, improved technologies for standardization, and supporting capacities of member countries. The World Intellectual Property Organization (WIPO) has supported initiatives for IPR protection of traditional medical knowledge. Other international organizations such as The Commonwealth Secretariat, European Union, World Bank and World Trade Organization also have programs on certain aspects of traditional medicine. Similarly nongovernmental bodies such as Cochrane Collaboration, Ford Foundation and World Wide Fund for Nature (WWF) have also been assisting various initiatives in TCAM (WHO 2002). In the United Nations Committee on Economic, Social and Cultural Rights resolution of 2000, article 34 on the right to the highest attainable standard of health, states' obligations to respect include, "obligation to refrain from prohibiting or impeding traditional preventive care, healing practices and medicines."

Besides, there are policies regarding indigenous people, traditional knowledge (TK), bio-diversity etc., which have synergy with TCAM policies. The United Nations Declaration on the Rights of Indigenous Peoples of 2007¹²⁾, article 24, is about right to use traditional medicines. The Convention on Biological Diversity (CBD) 1992¹³⁾, Indigenous and Tribal Peoples Convention (ILO) 1989¹⁴⁾, International Treaty on Plant Genetic Resources (FAO) 2001¹⁵⁾, UN Declaration on the Rights of Indigenous Peoples (UNPFII) 2006, the Convention for the Safeguarding of Intangible Cultural Heritage (UNESCO) 2003¹⁶⁾ are some of the major global instruments that address issues related to traditional knowledge. The Convention on Biological Diversity signed by 191 countries calls for the need to respect, preserve and maintain traditional cultures and encourage customary use of biological resources in line with principles of sustainable use and conservation; need to ensure equitable sharing of benefits among TK holders who have contributed to a research process; and the need to obtain prior informed consent of providing parties to access biological resources and related knowledge on mutually agreed terms between the parties. Similarly WIPO in conjunction with UNESCO has developed a *sui generis* model for intellectual property type protection of traditional cultural expressions.

There are several non-government organizations, civil society groups and other self regulated associations advocating TCAM. Some of the local approaches to preserve and promote traditional medicine include documentation, building of databases, assessment through community based approaches, self help approaches through home/community herbal gardens, community health workers training on various aspects, organizing and training local healers, interventions and research initiatives on specific conditions (such as malaria, HIV, anaemia), orientation of conventional health professionals on TCAM, consumer watch, livelihood promotion through economic activities, conservation and sustainable use of resources, multi stakeholder participation and evolving guidelines on benefit sharing and knowledge protection.

12) <http://www.un.org/esa/socdev/unpfii/en/drip.html>—Article 24—Indigenous peoples have the right to their traditional medicines and to maintain their health practices, including the conservation of their vital medicinal plants, animals and minerals. Indigenous individuals also have the right to access, without any discrimination, to all social and health services.

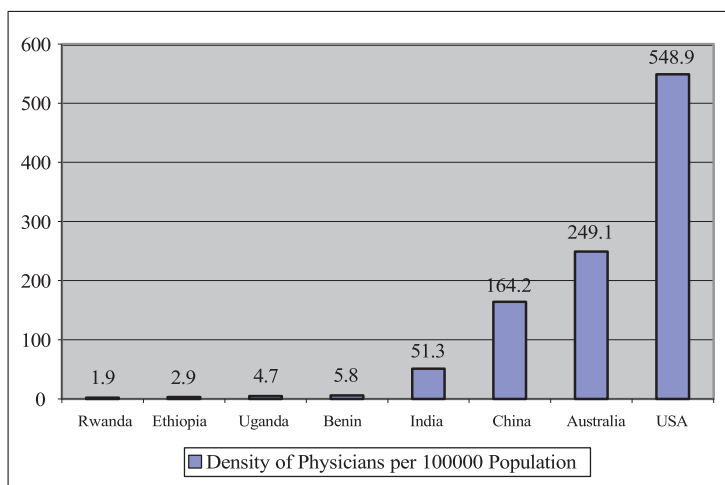
13) Convention on Biological Diversity (CBD)—see article 8J—<http://www.cbd.int/traditional/>.

14) Indigenous and Tribal Peoples Convention (ILO)—see article 25—<http://www.ilo.org>.

15) International Treaty on Plant Genetic Resources (FAO)—see article 9—<ftp://ftp.fao.org/ag/cgrfa/it/ITPGRe.pdf>.

16) United Nations Educational, Scientific and Cultural Organization (UNESCO)—see <http://unesdoc.unesco.org/images/0013/001325/132540e.pdf>.

Figure 2 Density of Modern Medicine Physicians per 100,000 persons in various countries



Data source: Patwardhan 2005

4. Role of Traditional Medicine in Public Health

4.1 Inadequacies in Health System

According to the World Health Organization, one third of the global population has no regular access to essential modern medicines, and in parts of Africa, Asia and Latin America, about half of the population faces shortage of minimum healthcare. Studies on public health in the developing world repeatedly point to inadequacies in health care financing by the states which has led to a situation of highly limited material and human resources for healthcare services. Patwardhan (2005) cites the density of physicians of modern medicine per 100,000 persons in various countries as on year 2004 as: Rwanda 1.9, Ethiopia 2.9, Uganda 4.7, Benin 5.8, India 51.3 and China 164.2. This is in contrast to countries such as Australia and the USA where the figures are 249.1 and 548.9 respectively. This reveals the glaring inequities in health care delivery in developing countries. External resource oriented, foreign technology based and vertically designed healthcare programs have been a major stumbling block for not achieving desired health outcomes in many developing countries. WHO identifies that the main constraints are low literacy and income levels, socio-cultural beliefs and practices, and suboptimal utilization of health facilities.

Heavy burden of communicable diseases such as HIV, malaria and other parasitic diseases, pneumonia, diarrhea, tuberculosis, coupled with chronic diseases such as diabetes, ischemic heart diseases etc., (a situation often referred as double burden), persistently torment lives in these countries. High maternal and child mortality, rapid demographic changes and urbanization, under utilization of public healthcare, ineffective health support systems for poor population, increasing privatization of health facilities, migration of medical professionals, environmental changes and related epidemics are some other major public health concerns in such economies. High out of pocket spending on health in countries like India, which is around 78%, and lack of appropriate health insurance or social security are other concerns. Added to this, in the wake of globalization and WTO regime, there is a perceived challenge of increased inaccessibility and unavailability of healthcare to the economically disadvantaged people of such societies (Nambiar et al. 2007). To quote Nambiar et al. further, “a major challenge for health care planners is integrating health promotion and disease

prevention on the one hand, and treatment of acute illness and chronic care on the other. This has to be done at all levels of the health system with the aim of delivering quality services equitably and efficiently to the whole population.”

While the United Nations’ Millennium Development Goals (MDGs), WHO strategies and United Nations Human Rights office (UNHCHR) call for immediate actions to address access to health care, it vastly continues to remain a challenge at global and national levels. This is because ‘access’ involves physical, social, political and economic dimensions. Some of the key resolutions of the World Health Assembly 2005 were directed to addressing crisis of human resources, assuring health of poorest people, health of women and children, healthy aging, addressing microbial resistance and cancer prevention and control (Janska 2005).

4.2 Relevance of TCAM

In many regions of the world where modern healthcare is not readily available or affordable, public continue to rely on traditional medicines which are based on locally available natural resources and cultural knowledge. In a public health context, availability, accessibility, affordability, utility, quality, efficiency and equity have relevance in respective order in promotion of traditional medicine¹⁷). While much of the attention in TCAM sector has been given to address clinical, regulatory and supply oriented issues, there is a general neglect of wider public health dimensions (Bodeker and Kronenberg, 2002). Quantitative research to ascertain levels of existing access (both financial and geographic) and qualitative research to clarify constraints to extending such access are important (WHO 2002). The focus should be for those diseases which represent greatest burden for poor populations.

According to Kleinman (2002) health seeking arenas can be classified into three: home level, informal and professional sector. Of this, home level covers 75% and in every 1,000 illness episodes 750 never get outside of family sector and are managed through household means. Rest 25% is divided among professional sector such as hospital, clinics of biomedicine or western medicine, Chinese medicine, Ayurvedic medicine etc., and the non-professionalized, folk sector such as local healers, lay therapists with no institutional support¹⁸). Such a classification brings about a picture of the potential interventions of TCAM.

4.3 Health in Own Hands—Importance of Self Help and Home Level Care

Large scale community interventions like home herbal gardens in India have demonstrated that many simple primary health care problems like fever, upper respiratory tract infections, gastro-intestinal problems such diarrhea, dysentery, worm infestations, hepatitis, anaemia, arthritic conditions, and certain gynecological conditions can be managed at household level through simple herbal home remedies and early identification and interventions. Reproductive health and nutrition forms two important aspects of household care. Considerable health cost saving has been found through this program apart from health and nutrition benefits (Hariramamurthi et al. 2007). A similar approach of an efficient household care is the Toyama herbal medicine distributors who traveled across Japan for distributing essential medicines which remains an exemplary model of public health system in rural areas (JOICFP 1983). These and several such models attest to the potential of community interventions through TCAM for simple ailments.

17) Jaime Galvez Tan, paper presented at the Health and Sustainability Workshop, *Universiti Sains Malaysia*, Kotabharu, Malaysia, May 2008, unpublished.

18) Arthur Kleinman, National Institute of Health lecture, 2002—<http://videocast.nih.gov/Summary.asp?File=10463> accessed on 28th August 2009.

4.4 Role of TCAM in Communicable Diseases

In communicable diseases such as malaria, HIV, traditional medicine has proved its significance. Global incidence of malaria is around 300 million per year leading to mortality as high as 1.124 million and around 40% affected population have no access to effective modern drugs (Wilcox and Bodeker 2007). Two of the major drugs used in malaria management such as quinine and artemisinin are derived from traditional medical knowledge in Peru and China respectively. Traditional medicine is an important source for several such potential drugs for contemporary applications in various infectious diseases. A recent survey showed that 78% of patients living with HIV/AIDS in the USA use CAM medicines (WHO 2002: 14) and similar patterns have been reported in many other developed and developing countries. A number of systematic studies on efficacy are slowly emerging suggesting antiretroviral, immunomodulatory and opportunistic infection reducing effects of traditional management methods (Liu 2007).

4.5 Role in Chronic Diseases

Longer life expectancy in developed countries as well as newly emerging economies have brought increased risks of chronic, debilitating diseases such as cardiovascular diseases, musculo-skeletal disorders, cancer, diabetes and mental disorders. It is an accepted fact that TCAM is playing an important role in care of such chronic diseases. Systematic studies and wide dissemination of potentials of traditional medicine are required for further popularization of such methods.

4.6 Relevance of Local Healers as Health Care Providers

Folk healers continue to play a key public health role contributing to availability of human resources in countries where the population to physician ratio is high (see Figure 2). Apart from general healers, traditional orthopedic practitioners, birth attendants, poison healers, spiritual therapists, mental health providers, healers specialized in eye, pediatric conditions, skin diseases etc., are some of the specialty areas. Estimations suggest that around 60% of child deliveries in the world are managed by traditional birth attendants. Though many official policies do not recognize them, more countries are realizing the community health education role that healers can perform.

5. History and Current Status of Health Sector Integration

When it comes to combining contemporary health care with traditional medicine, different people have different ideas. Understanding of TCAM may be confirmed and assimilated to improve modern medical understanding, according to the utilitarian perspective. Several medications have this kind of integration; for instance, artemisinin for malaria and salicylic acid for fever. The idea of a syncretic viewpoint is to combine elements of two systems into one. A common model in modern health systems is complementarity, in which complementary and alternative medicine (TCM) services supplement those of conventional medicine. This is the case in many industrialized nations. According to proponents of the co-evolutionary theory, many bodies of knowledge undergo simultaneous development, driven in part by internal processes and in part by the feedback loops established by interactions and dialogues between various bodies of information. Understanding that scientific knowledge is just one facet of a much larger body of information and that all knowledge is inherently culturally entrenched and constitutive of historical evolution is fundamental to a trans-cultural and transdisciplinary synergy approach. Thorough engagement may be beneficial for both parties. Another romantic perspective is that TCAM should be allowed to stay its current state since it is fundamentally wonderful. Another argument is that traditional medicine in a hierarchical healthcare system pushes TCAM to the sidelines. The idea that TCAM needs constant updating by scientific investigations is another paternalistic viewpoint (Haverkort 2006). Many medications have been created and included based on conventional medical wisdom, and the utilitarian perspective is still the most popular among them.

In a fully integrated system, traditional and complementary medicine (TCM) is acknowledged and integrated into all parts of health care. This includes being part of the country's drug policy, having providers and products registered and regulated, having therapies available at public and private hospitals and clinics, having health insurance reimburse treatments with TCM, conducting relevant

research, and having access to education on TCAM. This kind of system is seen in countries like Vietnam, the Republic of Korea, and China. Countries like Equatorial Guinea, Nigeria, Mali, Canada, and India showcase a fully integrated TCAM system. In a "tolerant system," the legislation permits some complementary and alternative medicine (CAM) activities, but the national health care system is based only on allopathy (WHO 2002: 8). An important step in incorporating TCAM techniques into national drug policies and regulatory procedures was the 1978 Alma Ata statement, given at the World Health Organization's international conference on primary health care. The declaration called for the incorporation of proven therapies. In line with TCAM principles, it also determined that health is more than just the absence of sickness or infirmity; it encompasses a person's emotional, psychological, and social wellness as a whole. Developed nations may learn a lot from Asia's successes in integrating TCAM into national policy (Bodeker 2001: 164). Even as early as the 1950s, nations like China were incorporating traditional medicinal practices, such as the renowned barefoot physicians program. Opponents contend that this has led to "biomedicalization" and a watered-down version of traditional Chinese medicine. With conventional medicine's structural and functional supremacy established, the contemporary health system has allegedly evolved into a hierarchical pluralism (Lee 1998). From the Edo period onwards, Japan had a well-established public health system that integrated traditional medicine via the Toyama medicine distributors (JOICFP 1983: 2). However, during the Meiji restoration era, allopathic medicine took over, and traditional medicine was only brought back in the 1970s due to high consumer demand. One explanation for Japan's long life expectancy is the seamless integration of traditional practices, particularly those pertaining to nutrition and health, with the country's advanced technical infrastructure. Similar to the rest of the world, traditional medicine in South Asia began to emerge in the early 20th century. In the years after India's independence, the practice of Ayurveda flourished thanks to the country's eclectic attitude and parallel model. Despite the fact that it helped traditional medical systems become more self-sufficient, they have still not been completely included into public health systems because of persistent resistance from conventional medicine.

Governments at the national level have been sluggish to react, despite World Health Organization policy instructions calling for the worldwide integration of TCAM. Concurrently, people figure out how to connect different systems the right manner, depending on what they require. According to researchers, there are a number of reasons why beneficiary groups may not share the same level of enthusiasm as national governments and international organizations when it comes to certain forms of integration (Vander Geest 1990: 1032). Although there has been a gradual shift in the last decade, as seen by the rise in the number of nations establishing national policies, the seeming conflict between popular preferences and national policies remains. Once supported by a consumer or community-based movement, TCAM is now gaining backing from the state via aggressive national policy.

6. Key Challenges

In the recent decades though there have been certain international and national policies for preserving and promoting traditional medicine, the progress of their implementation has been rather slow. Additionally these policies fall short of adequately addressing a number of concerns related to TCAM such as safety, efficacy, quality, rational use, availability, preservation and development of such health care, sustainable use of natural resources and assuring equity in transactions at various levels and so on (WHO 2002, Bodeker et al. 2007). Lack of sound scientific evidence relating to safety and efficacy, problems in ensuring quality and rational use, inadequate understanding of socio-cultural context

of their practice and usage, protection of intellectual property rights of knowledge holders, assuring sustainable natural resource use, regulation and capacity building of non-formal practitioners, developing appropriate methodologies for evaluation, resolving conflicts with mainstream medicine are some of the key challenges in the sector.

6.1 Safety, Efficacy, Quality

Towards the end of 19th century traditional medicine production shifted from a home level production to cottage industry and subsequently to large industrial mass production. For instance, today in India there are over 9,000 registered pharmaceutical industries of various Indian systems of medicine. Though the percentage of large industries is less, quality control is a major challenge.

According to WHO, the quantity and quality of safety and efficacy data available on TCAM are far from sufficient to meet the criteria needed to support its use worldwide. This is due to variety of reasons such as lack of proper documentation, appropriate policies and even a suitable research methodology. It is argued that while modern medicine emphasizes on a scientific approach, and content that is value-free and unmarked by cultural aspects, TCAM have developed rather differently with much influence by the culture and historical context in which they first evolved. Their epistemic framework, principles, concepts and practice are quite different from those of Western biomedicine (Shankar et al. 2006). They generally tend to focus on a holistic approach to life, equilibrium between mind and body and the environment and adopt a preventive approach (WHO 2002) thus making it difficult to develop appropriate methodologies without harming these unique features. Moreover issues such as chemical complexity of multiple plant based formulations are also challenges for developing a suitable methodology for research.

In popular parlance there is a general understanding that herbal medicines are safe. However reports of toxicity in traditional medicines have been a matter of concern currently. A recent study reported heavy metal content in Ayurvedic herbal preparations sold in the American market and have recommended mandatory toxic heavy metal testing for all herbal products. Researchers argue that such studies are important and needed, however are more related to the quality control failures of the mass manufacturing activities. Often these reports are wrongly interpreted and have a negative implication on the use. Effective quality control and regulation are certainly needed without limiting public access to these preparations or resorting to restrictive trade practice, at the same time ensuring public interest (Patwardhan 2005).

There has been no development of alternate standards and methods at any national or international level. Thus there are also differing risk assessments in different regions for TCAM. Like in other products, varying regulations in different countries often create double standards for export and domestic consumption of herbal products especially in developing countries. In many countries usage in tradition is considered a reason for exemption from strict safety regulations for TCAM, which may not be valid in all instances. According to Shia et al. (2007), when traditional medicine is practiced outside its original context and practiced as complementary or alternative medicine, there is a need for increased vigilance due to differing population characteristics, modification of formulations and methods of the transported knowledge. According to WHO, as a general rule evaluation of TCAM should take care of its medical, historical and ethnological background of herbal products and traditional experience of its use. European Union is adopting a 'traditional use registration' procedure for herbal medicines. Similarly many other countries are introducing such systems. Safety monitoring for herbal medicines is also increasing. Adverse experiences from plants such as *Aristolochia*, drug interactions of St. John's wort and toxicity of Kava-kava have increased awareness among public and scientific community. Under reporting and poor quality of data provided by users are major challenges for regulators (Barnes 2007). Countries with their own traditional medical systems are more likely to measure risks against benefits. Also in countries where TCAM is recently becoming popular, safety is often considered prime compared to efficacy like in the USA (Shia et al. 2005).

Standardization of several aspects such as nomenclature of medicinal plants and other resources, their collection practices, semi processes and final processing, packaging, preservation, storage, product life, labeling and modes of distribution including clinical application are needed to ensure quality, safety and efficacy of TCAM.

Monitoring of practitioners is also done in various countries by checking their usage of medicines and medical procedures, re-registration after a given number of years, medical supervision by allopaths, introduction of voluntary self regulation systems, and so on. Often ambiguities in regulations strain referrals and relationship of conventional practitioners and TCAM practitioners. Non disclosure of complementary therapies used along with conventional medicines by patients during allopathic consultation is as high as 77% which stymies efficacy assessment of therapies. Concern about negative responses, a perception that physicians need not know about therapies outside their domain, and physicians do not elicit questions about other therapies are considered reason for nondisclosure (Bodeker et al. 2007: 14). Other reasons could be that the patient did not consider complementary interventions as serious medical methods and lack of awareness about consequences of drug interactions. This fact points to a need to strengthen physician-patient relationship and building awareness about the potentials and likely problems of such therapies both among patients and conventional medical practitioners.

6.2 Rational Use

Information, education and communication are three major pillars of rational use. Qualification and licensing of providers, proper use of products of assured quality, good communication between TCAM providers, allopathic practitioners as well as patients and provision of scientific information and guidance for public (WHO 2002) are some of the key challenges in assuring rational use. Proper consumer information is most important in facilitating appropriate usage of TCAM.

WHO has its mission in essential drugs and medicines policy to help save lives and improve health by articulating policy and advocacy positions, working in partnership, producing guidelines and practical tools, developing norms and standards, stimulating strategic operational research, developing human resources and managing information (WHO 2002: 5). A country specific essential drug list for TCAM would facilitate sustainable and prioritized production and consumption of TCAM medicines.

6.3 Education

Two dimensions have been identified as important in education. The first one is to ensure that the knowledge, qualifications and training of TCAM practitioners are adequate. Secondly, there is a good understanding between TCAM practitioners and that of conventional medicine and there is complementarity in the practice.

There are various models with respect to education. In some countries TCAM courses are integrated into allopathic medical education. Elsewhere TCAM courses are taught in the same duration and manner in which allopathic courses are designed. In some regions TCAM is taught through short term courses. In many developing countries informal, experiential learning by apprenticing with physicians continues to be the major trend. All of them have their own attendant issues. While little attention may be paid by allopathic students when it is integrated into their curriculum, a university level formal education for TCAM makes it difficult to transfer many of the experience based aspects of tradition in an institutional milieu. For example pulse diagnosis or the understanding of vital points or certain non physical methods of treatments are seldom taught in Indian Ayurvedic universities today. Similarly short term courses also fall short of giving sufficient learning for students about certain experiential elements. While experiential learning through apprenticing with a healer used to be the method traditionally, today it does not find its place in an overwhelmingly formalizing system and due to lack of recognition for those trained in family traditions.

6.4 Accessibility and Cost Effectiveness

Over 50% of deaths in developing countries are due to five infectious diseases. Common communicable diseases are widely prevalent in areas where access to modern drugs is limited (WHO 2002: 24). In the developing countries TCAM continues to be comparatively inexpensive though it is feared that a technology intensive production process would make TCAM unaffordable. For the health sector to improve, measures such as improving physical and economic access, preventive strategies, wellness management, promotion of best and essential practices in both communicable and chronic diseases, increased cooperation between various medical systems, sustainable natural resource use, protection of intellectual property rights, and equitable transactions are vital.

6.5 “Bio-medicalisation” of TCAM

Formalization of TCAM is resulting in increasing “biomedicalisation” of TCAM practices as they are being integrated into the formal health systems. Fears about safety and efficacy, hierarchical relationship of medical systems, economical and political factors including global dominance of the west, unfamiliarity with TCAM approaches among policy makers, are all playing a negative role in this phenomenon (Bodeker et al. 2007: 76). This contributes to erosion of local knowledge especially relating to non-material or metaphysical aspects, continued marginalization of practitioners, increasing absorption of best drugs and practices into allopathic knowledge and so on. Conflict with formal systems in many countries even those with strong history of TCAM, is a major issue as allopathic professionals in most regions have strong reservations and sometimes total disbelief about the benefits of TCAM (WHO 2002).

6.6 Research

A large number of present modern drugs are from traditional medical knowledge. Experience of drugs like Artemisia, St. John’s wort has boosted confidence among pharmaceuticals to establish the efficacy of other extensively used TCAM therapies (Patwardhan 2005). However recent reviews have shown that clinical trials in TCAM have been scanty and inadequately designed.¹⁹⁾ The low level of research has slowed development of national standards and integration efforts. There is an increase in research on TCAM in Japan and China while in other countries research programs have been bare minimum.

TCAM therapies and drugs can often be equated with modern surgical procedures without any rigorous clinical trials and are based on individual case reports of patient series. It is said that before randomized clinical trials are taken up, ethnographic, epidemiological, observational, survey and cohort methodologies are important for developing comprehensive research designs. Care should be exercised to be sensitive to the theoretical, clinical and cultural assumptions of the modality or system being evaluation in order to ensure that such research designs adequately measure what one thinks is being studied (Bodeker and Kronenberg 2002: 1589). It is a welcome situation that in some countries, exemption is given to medicines with history of use to pass to the phase three clinical trials with preliminary toxicity studies.

Epidemiological and public health mapping exercises are neglected aspects in the TCAM field. They are important to study population based effects of TCAM use as well as creating data on the presence and quality of service by TCAM providers, especially in areas where there is limited access to conventional health care (Bodeker and Burford 2007: 434). There are also insufficient contributions from social sciences to TCAM and most studies consider cultural knowledge as a stumbling block for health sector development.

19) The Cochrane of TCAM found that article indexed as alternative medicine formed only 0.4% of the total number of Medline listed articles for the period of 1966—1996. However this is steadily improving showing a positive trend (WHO 2002: 22).

6.7 Evidence Based Medicine (EBM)

EBM has emerged as an important dimension in modern medical care. The modernist attitude towards traditional knowledge has been as 'either modernize or disappear'. In a context where the mightiest comes to be identified with the best reason (Couze and Featherstone 2006: 459)²⁰, traditional medicine is in a challenging process of proving itself through a completely different epistemology. However public preferences are moving in a direction where science is not the starting point for health decision making (Terasawa 2004, Janska 2005). It is feared that imposition of EBM, research on selected aspects of TCAM through randomized controlled studies, and the absorption of successful practices as evidence based 'modern' medicine would result in medical absorption and finally resulting in an erosion of 'alternate' approaches to health.

6.8 Intellectual Property Rights and Equitable Benefit Sharing

Discussions on ownership issues of TCAM have been centered on two major multilateral bodies. The Convention on Biological Diversity and the World Trade Organization's (WTO) agreement on Trade Related Intellectual Property Rights (TRIPS) which advocates exclusive rights on any invention under patents, geographical indications, trade secrets and trade marks and makes no distinction for traditional knowledge. TRIPS takes the position that ownership is fully based on registration of innovations. While there are discussions ongoing on how to synergize and find a balance between these two conventions, the topic assumes high importance as researchers and pharmaceutical industries are increasingly looking for better products and commercial applications.

6.9 Natural Resources and Their Sustainable Use

TCAM is highly dependant on biodiversity and there is increasing demand for plants, animal and mineral resources. This has led to a situation of endangering many important medicinal plants. There is still no country wise estimation of medicinal plant diversity, data on cultivated and wild sources and trade data in terms of domestic and export demand. There is also insufficient data on agro-technology of medicinal plants. Variation in active ingredients in plants collected from different agro-climatic locations is also a major problem. Though many countries have initiated efforts of both in-situ and ex-situ conservation of medicinal flora and fauna, efforts in this area remain abysmally low and confounded by non-transparency. It is estimated that in countries like India 95 % of medicinal resources are harvested from the wild through unsustainable collection methods. Around 300 medicinal plants in the country have been categorized under different levels of threat status (FRLHT 2002)²¹. WHO has prepared guidelines on good agricultural practices but the implementation of this has also been low.

6.10 Local Healers

From the local healers point of view lack of successors, erosion of knowledge, conflicts with mainstream knowledge, lack of recognition, restrictive regulations for collection of medicinal materials, lack of adequate intellectual property protection, incompatibility of local ownership values with contemporary laws are some of the key concerns.

20) According to Couze and Featherstone (2006: 458, 460), "They (such impositions) attest to the alternative visions and trajectories sidelined when modernity acquires the force of a project of worlding a world according to a singular vision and temporalization of history and older knowledge may be readmitted but subject to the critical and skeptical judgment of a rational method, uncluttered by faith and dogmas".

21) See also www.frlht.org for detailed data on endangered medicinal plants in India and efforts for their conservation.

6.11 Need for an Intercultural Approach

It is necessary to understand these challenges in light of the historical background of post-colonial developments of these knowledge systems. One of the major influences has been the positivist school of both modern natural and social sciences which continued to marginalize contributions of traditional knowledge till recent times. In the promotion of TCAM in the contemporary context it is essential to have an intercultural approach. As mentioned earlier traditional medical knowledge in various countries have evolved within socio-cultural and historical context and their epistemic framework, principles, concepts and practice are quite different from those of modern science (WHO 2002: 7, Shankar et al. 2007). While there is a contemporary value in applying modern science and technology tools for creating objective and verifiable standards for traditional knowledge products and concepts, currently the approach to creating standards is one-sided. This is because it does not adequately consult the available qualitative TCAM standards and parameters. Furthermore, most therapies in TCAM involve both drug as well as non-drug interventions (Shankar et al. 2007) making it complex to develop appropriate methodology.

Today, government regulators do not take epistemological differences into account while setting standards to monitor quality in respect of consistency, safety and efficacy of TCAM products and services. An intercultural collaborative approach involving in-depth consultation between traditional and modern sciences will be central to overcome some of the complex challenges mentioned in this section.

7. Conclusion

The general population has embraced traditional medical practices for their diverse health care requirements, and these practices are widespread around the globe. Although they are being supported and even expanded by both emerging and established nations via ongoing community or public patronage, there is a disconnect between popular choice and national, institutional attempts to integrate them. Traditional medical cultures are still being marginalized in health systems due to the high proportion of external resources used for development, the focus on technology, and the role of markets as the primary driver of distribution. In light of the impending health care demands, it is clear that any healthcare paradigm dependent on a single medical system would struggle to meet these needs. As a corollary, it is and will remain evident that cultural and traditional medical knowledge serves as a catalyst for achieving health sector development goals. Use of TCAM in the developed and developing worlds is quite different, however. In wealthy nations, security is paramount; in poorer nations, accessibility and affordability seem to be the main concerns. varied stakeholders, including regulators, customers, practitioners, and the industry as a whole, seem to have quite varied perspectives on the challenges and concerns at hand. Few meaningful integration models and policy studies have been conducted in the field, and there is also a lack of data on TCAM use. Rather than idealizing TCAM, we must take into account concerns about their effectiveness, quality, accessibility, and reasonable usage via appropriate legislative measures. We must also find ways to integrate them with the mainstream health system while preserving their distinctive qualities and variety. Developing a health care system that is more expensive, less safe, and neglects to handle the management of health in a publically accountable way is possible if we do not critically evaluate what should be integrated and what should not (WHO 2002: 20). It is necessary to consider the contextual realities and epistemological nuances of these systems while crafting suitable regulations.

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