WHO Policy Perspectives on Medicines

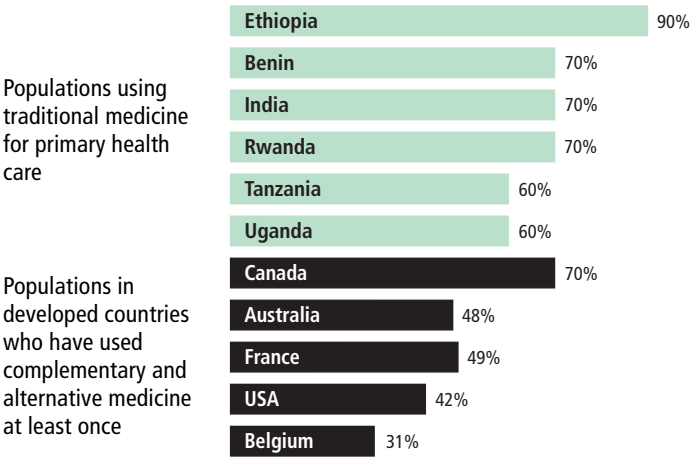
No. 2 May 2002
World Health Organization
Geneva

Traditional Medicine – Growing Needs and Potential

Populations throughout Africa, Asia and Latin America use traditional medicine (TM) to help meet their primary health care needs. As well as being accessible and affordable, TM is also often part of a wider belief system, and considered integral to everyday life and well-being. Meanwhile, in Australia, Europe and North America, "complementary and alternative medicine" (CAM)[1] is increasingly used in parallel to allopathic medicine, particularly for treating and managing chronic disease. Concern about the adverse effects of chemical medicines, a desire for more personalized health care and greater public access to health information, fuel this increased use (Figure 1; Box 1).

But widespread and growing use of TM has created public health challenges in terms of: policy; safety, efficacy and quality; access; and rational use (Box 2). Policy-makers, health care providers, TM providers[2] and nongovernmental organizations (NGOs) can respond to these challenges, however, and help develop the potential of TM as a source of health care (Box 3).

Figure 1 Many developing country populations use TM to help meet health care needs, while many populations in developed countries have used CAM at least once



Sources: Eisenberg DM et al, 1998; Fisher P & Ward A, 1994; Health Canada, 2001; World Health Organization, 1998; and government reports submitted to WHO.

Box 1 What is traditional medicine?

Traditional medicine includes diverse health practices, approaches, knowledge and beliefs incorporating plant, animal and/or mineral based medicines, spiritual therapies, manual techniques and exercises, applied singularly or in combination to maintain well-being, as well as to treat, diagnose or prevent illness.

Commonly used therapies and therapeutic techniques

	Chinese Medicine	Ayurveda	Unani	Naturopathy	Osteopathy	Homeopathy	Chiropractic
Herbal medicines	●	●	●	●	■	●	
Acupuncture/acupressure	●				■		
Manual therapies	■	●	●	⊡	●		●
Spiritual therapies	●	●	●	●			
Exercises	■	■		■			

● = *commonly incorporates this therapy/therapeutic technique*
■ = *sometimes incorporates this therapy/therapeutic technique*
⊡ = *incorporates therapeutic touch*

[1] The term "traditional medicine" (TM) is used throughout most of this paper. But in some developed countries, the term "complementary and alternative medicine" (CAM) is used where the dominant health care system is based on allopathic medicine, or where TM has not been incorporated into the national health care system.

[2] Traditional medicine *practitioners* are generally understood to be traditional healers, bone setters, herbalists, etc. Traditional medicine *providers* include both traditional medicine practitioners and allopathic medicine professionals such as doctors, dentists and nurses who provide TM/CAM therapies to their patients – e.g. many allopathic doctors also use acupuncture to treat their patients.

Box 2 Key messages for policy-makers

- TM includes diverse health practices, approaches, knowledge and beliefs, incorporating medicines from plant, animal and/or mineral sources, spiritual therapies, manual techniques and exercises.
- TM is widely and increasingly used for a wide spectrum of diseases by people in both developed and developing countries.
- A growing number of countries are adopting national policies on TM and developing specific regulatory capacity, especially for herbal medicines. Increasingly, countries are defining the role that TM plays in national health care delivery systems.
- Scientific evidence from randomized clinical trials is strong for many uses of acupuncture, for some herbal medicines and for some of the manual therapies.
- Nevertheless, much of the scientific literature on TM provides inadequate evidence on safety and efficacy: individual case reports and patient series, with no control or comparison group.
- Over-harvesting of medicinal plants threatens some ecosystems.
- Protection and preservation of TM knowledge is essential to ensure access to traditional forms of health care and respect for those who hold TM knowledge. Intellectual property rights issues require national and international attention.

Policy: generating sound action in TM

As of the year 2000, 25 countries reported having a national TM policy. Such a policy provides a sound basis for defining the role of TM in national health care delivery, ensuring that the necessary regulatory and legal mechanisms are created for promoting and maintaining good practice, that access is equitable, and that the authenticity, safety and efficacy of therapies are assured.

A national TM policy is urgently needed in those developing countries where the population depends largely on TM for health care, but without its having been well evaluated or integrated into the national health system. Many developed countries are now also finding that TM issues concerning, for example, safety and quality, licensing of providers and standards of training, and priorities for research, can best be tackled within the framework of a national TM policy.

Safety, efficacy and quality: crucial to extending TM care

Allopathic practitioners emphasize the scientific approach of allopathic medicine, and contend that it is free of cultural values. TM therapies have developed rather differently, having been very much influenced by the culture and historical conditions within which they first evolved. Their common basis is an holistic approach to life, equilibrium between the mind,

Box 3 Policies and actions checklist

Safety, efficacy and quality

- Establish registration and licensing of providers.
- Establish national regulation and registration of herbal medicines.
- Establish safety monitoring of herbal medicines and other TM therapies.
- Provide selective support for clinical research into use of TM for treating country's common health problems.
- Develop national standards, and technical guidelines and methodology, for evaluating safety, efficacy and quality of TM.
- Develop national pharmacopoeia and monographs of medicinal plants.

Access

- Identify safe and effective TM therapies and products.
- Support research into safe and effective treatment for those diseases which represent the greatest burden, particularly for poorer populations.
- Recognize role of TM providers in providing health care.
- Optimize and upgrade the skills of TM providers.
- Protect TM knowledge through recording and preservation.
- Cultivate and conserve medicinal plants to ensure their sustainable use.

Rational use

- Develop training guidelines for country's most commonly used TM therapies.
- Strengthen and increase organization of TM providers.
- Strengthen cooperation between TM providers and other health care providers.
- Make reliable information on proper use of TM therapies and products available for consumers.
- Improve communication between health care providers and their patients concerning use of TM.

body and their environment, and an emphasis on health rather than on disease. Generally, the provider focuses on the overall condition of the individual patient, rather than on the particular ailment or disease from which the patient is suffering.

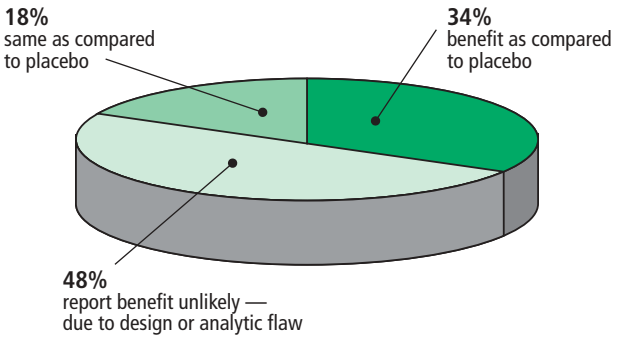
This more complex approach to health care makes TM very attractive to many. But it also makes scientific evaluation highly difficult since so many factors must be taken into account.

Even evaluating TM products, such as herbal medicines, can prove very difficult. This is because herbal medicine quality is influenced by several factors, such as when and where the raw materials were collected, and accuracy of plant identification.

Nevertheless, many TM practices and products have been used for a considerable period of time. And some scientific evidence points to promising potential. Acupuncture's efficacy in relieving pain and nausea, for instance, has been conclusively demonstrated and is now acknowledged worldwide. For herbal medicines (Figure 2), some of the best-known evidence for efficacy of a herbal product, besides that for *Artemisia annua* for managing malaria, concerns St John's Wort, for treating mild to moderate depression.

At the same time, a growing number of reports document the sometimes fatal adverse effects of misuse of traditional therapies and use of therapies for which information on safety is lacking.

Figure 2 Good evidence of efficacy exists for some herbal medicines – but evaluation is inadequate



% of randomized clinical trials (RCTs) showing benefit of herbal medicines (based on 50 RCTs with 10 herbal medicines for 18 therapeutic indications)

Source: Based on data in Herbal medicines: an evidence based look. Therapeutics Letter, *Issue 25, June–July 1998.*

Optimal use and expanded credibility of TM will therefore depend on developing an evidence base for safety and efficacy. This means consolidating existing national and international studies, and supporting new research to fill evidence gaps.

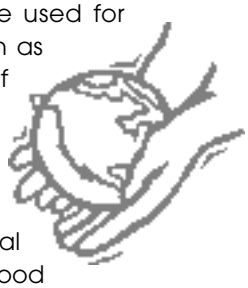
Access: making TM available and affordable

The world's poorest countries are most in need of inexpensive, effective treatments for diseases. WHO estimates that one-third of the global population still lacks regular access to essential drugs, and that in the poorest parts of Africa and Asia, this figure rises to over 50%. In these regions, some form of TM is often a more widely available and more affordable source of health care. However, if access to TM is to be increased to help improve health status, two issues must be tackled. They are: development of reliable standard indicators to accurately measure levels of access, and collection of qualitative data to identify constraints to extending access.

Safe and effective TM therapies must also be identified, to provide a sound basis for efforts to promote TM. The focus should be on safe and effective treatments for diseases which represent the greatest burden for poor populations, i.e. for malaria and HIV/AIDS.

Cooperation between TM providers and community health workers needs to be increased too. In some countries – notably in Africa – links between, for example, traditional birth attendants and primary health care providers are being strengthened. But in many others, these two types of heath care provider work in isolation from one another. TM therapies then risk being sidelined. Opportunities to deliver health messages are also lost. At the same time, some TM providers lack knowledge of primary health care and perform practices that carry health risks. The challenge is to recognize and ensure that the health skills and knowledge of TM providers are optimized.

Other access issues relate to protection of TM knowledge and sustainable use of natural resources. Many methods and regimes can be used for protecting TM knowledge, such as creating a national inventory of medicinal plants, recording TM knowledge, and creating a national policy on protection of TM knowledge. Sustainable use can also be promoted by several means, including adoption of good agricultural practices.



Rational use: ensuring appropriateness

Rational use of TM has many aspects, including: qualification and licensing of providers; proper use of good-quality products; good communication between TM providers, allopathic practitioners and patients; and provision of scientific information and guidance for the public.

Challenges in education and training are at least twofold. Firstly, ensuring that the knowledge, qualifications and training of TM providers are adequate. Secondly, using training to ensure that TM providers and modern health care professionals understand and appreciate the complementarity of the types of health care they offer.

Proper use of good quality products can also do much to reduce risks associated with TM products such as herbal medicines. However, regulation and registration of herbal medicines are not well developed in most countries, and the quality of herbal products sold is generally not guaranteed. Moreover, many are sold as over-the-counter or dietary supplements. Much more stringent control of TM products is needed.

More work is also needed to raise awareness of safe and appropriate use of TM. Side-effects following reactions between herbal medicines and chemical drugs can occur. Yet many patients do not inform their allopathic practitioners that they are taking herbal medicines. Information, education and communication strategies could overcome such problems.

WHO's role in meeting challenges in TM

To meet growing challenges in the area of TM, WHO has formulated a comprehensive working TM strategy for 2002–2005.[3] Flexible enough to integrate the needs of each WHO Region and Member State, it also addresses issues relating to national policy, safety and efficacy, access, and rational use of TM.

The strategy was developed through broad consultation with WHO Regional Offices and Member States, WHO Expert Committees and Collaborating Centres for Traditional Medicine, as well as through work with a broad range of partners with diverse interests in TM. The strategy provides a framework for action for WHO and its partners, to enable TM to play a far greater role in reducing excess mortality and morbidity, especially among impoverished populations. It incorporates four objectives relating to: policy; safety, efficacy and quality; access; and rational use (Table 1).

Many of the organizations and individuals who contributed to development of the *WHO Traditional Medicine Strategy 2002–2005* will work with WHO to implement it. Use of critical indicators (such as number of countries with a national traditional medicine policy, and number of countries with laws and regulations on herbal medicines) will help measure progress under each of the strategy objectives. Additionally, several surveys relating to policy, and regulation and use, will be carried out in cooperation with Member States and NGOs to assess progress.

Box 4 Organizations working on traditional medicine issues

Nongovernmental organizations (NGOs)

Worldwide, many NGOs are working in the field of traditional medicine. Just a few examples are given here.

Cochrane Collaboration: http://www.cochrane.org/cochrane/general.htm

Ford Foundation: http://www.fordfound.org/

PRO.ME.TRA: http://www.prometra.org/

World Wide Fund for Nature: http://www.panda.org/

World Conservation Union: http://www.iucn.org/

Global professional associations

Liga Medicorum Homeopathica Internationalis (International Homeopathic Medical League): http://www.lmhi.net/

World Federation of Chiropractic: http://www.wfc.org

World Self-Medication Industry: http://www.wsmi.org/

Specific initiatives also exist

Global Initiative for Traditional Systems of Health: http://users.ox.ac.uk/~gree0179/

Research Initiative on Traditional Anti-malarial Methods: http://mim.nih.gov/english/partnerships/ritam_application.pdf

[3] Given the considerable regional diversity in the use and role of TM, and the difficulties that persist in defining precise terminology for describing TM therapies and products, and in assessing the reliability of methodologies used to collect TM data, the strategy must be regarded as a working document only, that may later have to be modified.

Table 1 WHO traditional medicine strategy 2002–2005: objectives, components and expected outcomes

Objectives	Components	Expected outcomes
POLICY: Integrate TM/CAM with national health care systems, as appropriate, by developing and implementing national TM/CAM policies* and programmes	**1. Recognition of TM/CAM** Help countries to develop national policies and programmes on TM/CAM	1.1 Increased government support and recognition of TM/CAM, through comprehensive national policies on TM/CAM 1.2 Relevant TM/CAM integrated into national health care system services
	2. Protection and preservation of indigenous TM knowledge relating to health Help countries to develop strategies to protect their indigenous TM knowledge	2.1 Increased recording and preservation of indigenous knowledge of TM, including development of digital TM libraries
SAFETY, EFFICACY AND QUALITY: Promote the safety, efficacy and quality of TM/CAM by expanding the knowledge base on TM/CAM, and by providing guidance on regulatory and quality assurance standards	**3. Evidence base for TM/CAM** Increase access to and extent of knowledge of the safety, efficacy and quality of TM/CAM, with an emphasis on priority health problems such as malaria and HIV/AIDS	3.1 Increased access to and extent of knowledge of TM/CAM through networking and exchange of accurate information 3.2 Technical reviews of research on use of TM/CAM for prevention, treatment and management of common diseases and conditions 3.3 Selective support for clinical research into use of TM/CAM for priority health problems such as malaria and HIV/AIDS, and common diseases
	4. Regulation of herbal medicines Support countries to establish effective regulatory systems for registration and quality assurance of herbal medicines	4.1 National regulation of herbal medicines, including registration, established and implemented 4.2 Safety monitoring of herbal medicines and other TM/CAM therapies
	5. Guidelines on safety, efficacy and quality Develop and support implementation of technical guidelines for ensuring the safety, efficacy and quality control of herbal medicines and other TM/CAM products and therapies	5.1 Technical guidelines and methodology for evaluating safety, efficacy and quality of TM/CAM 5.2 Criteria for evidence-based data on safety, efficacy and quality of TM/CAM therapies
ACCESS: Increase the availability and affordability of TM/CAM, as appropriate, with an emphasis on access for poor populations	**6. Recognition of role of TM/CAM providers in health care** Advocate recognition of TM/CAM providers in health care by encouraging interaction and dialogue between TM/CAM providers and allopathic practitioners	6.1 Criteria and indicators, where possible, to measure cost-effectiveness and equitable access to TM/CAM 6.2 Increased provision of TM/CAM through national health services 6.3 Increased number of national organizations of TM/CAM providers
	7. Protection of medicinal plants Promote sustainable use and cultivation of medicinal plants	7.1 Guidelines for good agriculture practice in relation to medicinal plants 7.2. Sustainable use of medicinal plant resources
RATIONAL USE: Promote therapeutically sound use of appropriate TM/CAM by providers and consumers	**8. Proper use of TM/CAM by health providers** Increase capacity of TM/CAM providers to make proper use of TM/CAM products and therapies	8.1 Basic training in commonly used TM/CAM therapies for allopathic practitioners 8.2 Basic training in primary health care for TM practitioners
	9. Proper use of TM/CAM by consumers Increase capacity of consumers to make informed decisions about use of TM/CAM products and therapies	9.1 Reliable information for consumers on proper use of TM/CAM therapies 9.2 Improved communication between allopathic practioners and their patients concerning use of TM/CAM

** With the exception of China, the Democratic People's Republic of Korea, the Republic of Korea and Viet Nam, such integration has nowhere taken place. In some countries national assessment will therefore be needed to ascertain which TM/CAM modalities can be best integrated into the national health care system.*

Key documents

Astin JA. Why patients use alternative medicine: results of a national study. *Journal of the American Medical Association*, 1998, 279(19):1548–1553.

Bodeker G et al. A regional task force on traditional medicine and AIDS. *Lancet*, 2000, 8 April, 355(9211): 1284.

Bodeker G. Lessons on integration from the developing world's experience. *British Medical Journal*, 2001, 322:164–167 (20 January).

Chaudhury RR & Rafei UM, eds. *Traditional Medicine in Asia.* New Delhi, WHO Regional Office for South-East Asia, 2002 (SEARO Regional Publications No.39).

Eisenberg DM et al. Trends in alternative medicine use in the United States, 1990–1997: results of a follow-up national survey. *Journal of the American Medical Association*, 1998, 280(18):1569–1575.

Fisher P & Ward A. Medicine in Europe: complementary medicine in Europe. *British Medical Journal*, 1994, 309: 107–111.

Health Canada. *Perspectives on Complementary and Alternative Health Care. A Collection of Papers Prepared for Health Canada.* Ottawa, Health Canada, 2001.

Herbal medicines: an evidence based look. *Therapeutics Letter*. Issue 25, June–July 1998. http://www.ti.ubc.ca.pages/letter25.htm.

Jonas WB. Alternative medicine: learning from the past, examining the present, advancing to the future (editorial). *Journal of the American Medical Association*, 1998, 280(18):1616–1618.

World Health Organization. *Report: Technical Briefing on Traditional Medicine. Forty-ninth Regional Committee Meeting, Manila, Philippines, 18 September 1998.* Manila, WHO Regional Office for the Western Pacific, 1998.

World Health Organization. *Consultation Meeting on Traditional Medicine and Modern Medicine: Harmonizing the Two Approaches.* Geneva, World Health Organization, 1999 (document reference (WP)TRM/ICP/TRM/001/RB/98–RS/99/GE/ 32(CHN)).

World Health Organization. *Development of National Policy on Traditional Medicine. A Report of the Workshop on Development of National Policy on Traditional Medicine, 11–15 October 1999, Beijing, China.* Manila, WHO Regional Office for the Western Pacific, 1999.

World Health Organization. *Regional Consultation on Development of Traditional Medicine in South-East Asia Region, 1999.* New Delhi, WHO Regional Office for South-East Asia, 1999 (document reference SEA/Trad.Med./80).

World Health Organization. *General Guidelines for Methodologies on Research and Evaluation of Traditional Medicine*. Geneva, World Health Organization, 2000 (document reference WHO/EDM/TRM/2000.1).

World Health Organization. *Promoting the Role of Traditional Medicine in Health Systems: a Strategy for the African Region 2001–2010.* Harare, WHO Regional Office for Africa, 2000 (document reference AFR/RC50/Doc.9/R).

Zollman C & Vickers AJ. *ABC of Complementary Medicine*. London, BMJ Books, 2000 (reprinted from a series of articles that appeared in the *British Medical Journal* during 1999).

See also: http://www.who.int/medicines/

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