



# AN OVERVIEW OF THE TRADITIONAL MEDICINE SITUATION IN THE AFRICAN REGION

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WHO estimates that about 80% of the population in developing countries depends on traditional medicine for their Primary Health Care (PHC) needs. Traditional medicine and its practitioners were officially recognized by the Alma Ata Declaration in 1978 as important resources for achieving Health for All. Since then, member states and WHO governing bodies have adopted a number of resolutions and declarations on traditional medicine. Notable among these are resolution on “Promoting the role of traditional medicine in health systems: A Strategy for the African Region” adopted by the WHO Regional Committee for Africa in Ouagadougou, Burkina Faso, in 2000 and the declaration on the Decade of African Traditional Medicine (2001–2010) by the Heads of State and government in Lusaka in 2001. This article will focus on the achievements of countries in the implementation of the priority interventions of the Regional strategy since its adoption in 2000. The article will also cover the challenges countries are facing in implementing the Regional strategy and propose the way forward.

## RÉSUMÉ SUMÁRIO

L'OMS estime qu'environ 80% de la population des pays en voie de développement compte sur la médecine traditionnelle pour ses besoins en soins de santé primaires (SMP). En 1978, la Déclaration d'Alma Ata a officiellement reconnu que la médecine traditionnelle et ses praticiens sont des ressources importantes pour atteindre l'objectif de la Santé pour Tous. Dès lors, les États membres et les instances de l'OMS ont adopté un certain nombre de résolutions et de déclarations sur la médecine traditionnelle. Parmi celles-ci, on peut noter la résolution sur « La promotion du rôle de la médecine traditionnelle dans les systèmes de

A OMS estima que cerca de 80% da população dos países em desenvolvimento depende da medicina tradicional para as suas necessidades de Cuidados Primários de Saúde (CPS). A medicina tradicional e os seus praticantes foram reconhecidos oficialmente pela Declaração de Alma Ata em 1978 como importantes recursos para alcançar os objectivos da iniciativa Saúde para Todos. Desde então, os estados-membros e os órgãos dirigentes da OMS adoptaram um conjunto de resoluções e declarações sobre a medicina tradicional. Entre estas, destaca-se a resolução sobre a “Promoção do papel da medicina tradicional nos sistemas de

santé : Une stratégie pour la Région africaine », qui a été adoptée en 2000 à Ouagadougou, Burkina Faso, par le Comité régional de l'OMS pour l'Afrique. En 2001, à Lusaka, les chefs d'Etat et de gouvernements ont adopté la déclaration sur la Décennie de la médecine traditionnelle africaine (2001–2010). Cet article se concentrera sur les réalisations des pays dans la mise en œuvre des interventions prioritaires de la stratégie régionale depuis son adoption en 2000. L'article couvrira également les défis auxquels les pays sont confrontés dans la mise en œuvre de la stratégie régionale et il proposera la voie à suivre.

saúde: uma estratégia para a região africana”, adoptada pelo Comité Regional da OMS para África em Ouagadougou, Burkina Faso, em 2000 e a declaração sobre a Década de Medicina Tradicional Africana (2001–2010) dos Chefes de Estado e de Governo, em Lusaka em 2001. Este artigo centrar-se-á no sucesso de alguns países relativamente à implementação de intervenções prioritárias da estratégia Regional, desde a sua adopção em 2000. O artigo abrangerá também os desafios que os países estão a enfrentar na implementação da estratégia Regional e propõe uma via futura.

**Traditional medicine is the sum total of the knowledge, skills, and practices based on the theories, beliefs, and experiences indigenous to different cultures, whether explicable or not, used in the maintenance of health as well as in the prevention, diagnosis, improvement or treatment of physical and mental illness (1-2). Traditional systems in general have had to meet the needs of the local communities for many centuries. China and India, for example, have developed very sophisticated systems such as acupuncture and ayurvedic medicine. Traditional medicine is generally available, affordable, and commonly used in large parts of Africa, Asia, and Latin America. WHO estimates that about 80% of the population in developing countries still depend on traditional medicine for their PHC needs (3). However, this percentage may vary from country to country.**

**T**raditional medicine has demonstrated great potential of therapeutic benefits in its contribution to modern medicine. More than 30% of modern medicines are derived directly or indirectly from medicinal plants. Examples of these medicines are analgesics (aspirin, belladonna); anticancer medicines (vincristine and vinblastine), antihypertensive agents (reserpine); antimalarials (quinine, artemisinin); and decongestants (ephedrine). In the African Region, traditional health practitioners (THPs) generally far outnumber medical doctors. In Ghana and Swaziland for example, there are 25,000 and 10,000 patients for every medical doctor whereas there are 200 and 100 patients respectively, for every THP. Given the shortage of medical doctors in the African Region, THPs contribute immensely to health care coverage. Despite the contribution of traditional medicine and its practitioners to health care delivery, they were only officially recognized in 1978

by the Alma-Ata Declaration on PHC as important resources in achieving health for all by the year 2000 (4). Since then, a number of resolutions and declarations have been adopted by WHO governing bodies at regional (5) and global levels (6). In particular, Resolution *AFR/RC49/R5 on Essential Drugs in the WHO African Region* requested WHO to support Member States to carry out research on medicinal plants and to promote their use in health care delivery systems (7). The Regional Committee that adopted resolution *AFR/RC49/R5* also called on WHO to develop a comprehensive strategy on African traditional medicine.

The fiftieth session of the WHO Regional Committee for Africa, held in Ouagadougou in 2000, adopted the regional strategy by its resolution *AFR/RC50/R3* on promoting the role of traditional medicine in health systems (1). The aim of the Regional Strategy is to contribute to the achievement of health for all in the Region by optimizing the

use of traditional medicine. The Regional Strategy promotes the integration into health systems of TM practices and medicines for which evidence on safety, efficacy and quality is available and the generation of such evidence when it is lacking. The priority interventions of the Regional strategy are policy formulation; capacity building; research promotion; development of local production, including cultivation of medicinal plants; protection of intellectual property rights and indigenous knowledge.

This year's eighth African Traditional Medicine Day will coincide with the Decade since the adoption of the Regional Strategy in Ouagadougou on 31 August 2000 as well as the Decade of African Traditional Medicine declared by Heads of State and Government in Lusaka in July 2001 and will be commemorated with the theme: A Decade of African Traditional Medicine: Progress so far. This article gives an overview of activities that countries have

undertaken in implementing the priority interventions of the Regional strategy. The article summarizes the achievements made in the past ten years; the challenges faced and proposes the way forward.

## ACHIEVEMENTS MADE IN THE PAST TEN YEARS

### 1 POLICY FORMULATION

#### *Formulation of national policies and regulatory frameworks*

The adoption of the Regional strategy and its resolution AFR/RC50/R3 (1) was followed by the Abuja Declaration of April 2001, which identified traditional medicine as a research priority (8), and the designation, by the Organization of African Unity in 2001, of the period 2001–2010 as the Decade for African Traditional Medicine (9). The adoption of this declaration by African leaders was a strong political commitment that has heightened the profile of traditional medicine in countries of the WHO African Region. The African Summit of Heads of State and Government held in July 2003 in Maputo endorsed the plan of action for implementation of the Decade of African Traditional Medicine and the institution of the African

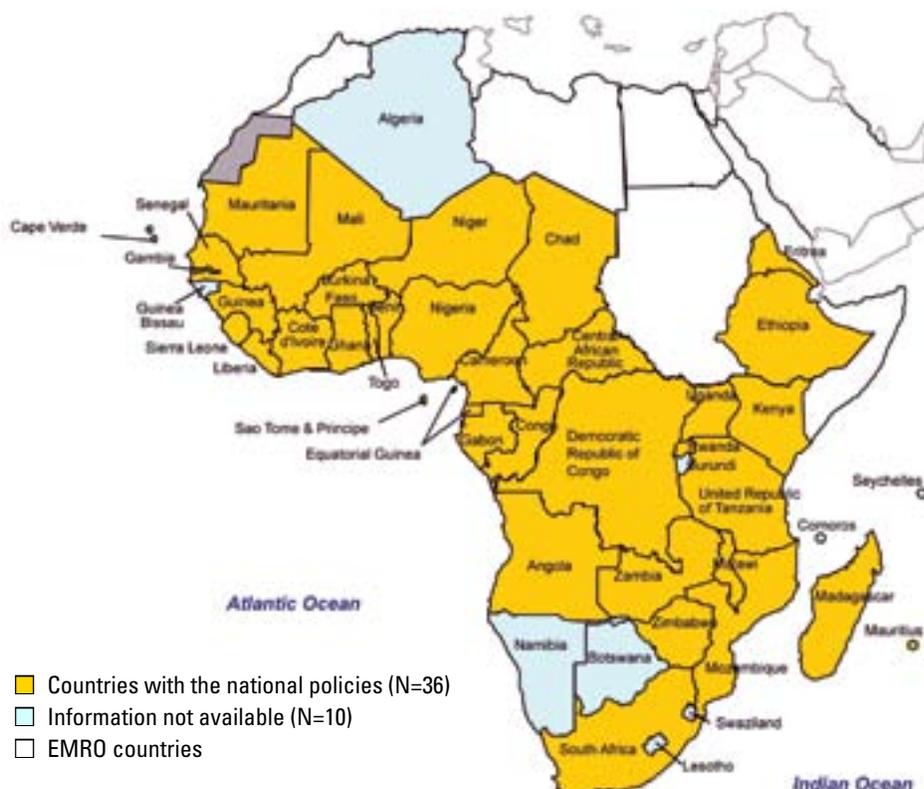
Traditional Medicine Day in Member States (10) to be celebrated every year on 31 August with effect from 2003. In May 2002, the WHA launched the first ever WHO Strategy on Traditional Medicine 2002–2005 (2).

Since the adoption of the Regional strategy, 28 countries have formulated national policies making a total of 36 out of 46 countries in the Region with such policies (Figure 1). In an effort to regulate, promote, develop and standardize the practice of African traditional medicine, 21 countries have developed legal frameworks for traditional medicine practice (e.g. the National Traditional Health

Practitioners (THPs) Act, 2004 of South Africa (11)); while 18 have National Codes of Ethics for THPs to enhance the safety, efficacy and quality of services provided to patients (e.g. the National Code of Ethics for THPs of Ghana of 2004 (12)). However, only 15 countries have developed national strategic plans for implementation of their policies, (e.g., the Congolese National Development Plan for Traditional Medicine (2008–2012) (13)).

National traditional medicine offices have been established in 39 of the 46 countries and 24 countries have traditional medicine programmes in their Ministries of health, of which

**Figure 1. Countries with the national policies on traditional medicine in the African Region**



12 traditional medicine offices and 14 TM programmes were established during the Decade. A total of 24 countries have established national expert committees as multidisciplinary and multisectoral mechanisms to support the development and implementation of policies, strategies and plans. Eight of these committees were established during the Decade.

### ***The African Traditional Medicine Day***

The inaugural African Traditional Medicine Day was commemorated in South Africa in 2003 in conjunction with the Fifty-Third Session of the WHO Regional Committee for Africa with the theme “African TM, Our Culture, Our Future”. Some countries, such as Benin, Burkina Faso, Ghana, Mali and Uganda, have instituted a National Traditional Medicine Week. These events have created enabling environments for training, collaboration between practitioners of traditional medicine and conventional medicine, for networking and information exchange.

## **2 RESEARCH PROMOTION**

### ***Production of scientific evidence on safety, efficacy and quality of Traditional Medicines***

A number of countries are conducting research on traditional medicines used for the

treatment of malaria, HIV/AIDS, diabetes, sickle-cell anaemia and hypertension in order to produce evidence on safety, efficacy and quality of TMs, and some have reported promising results. For example, the National Institute for Pharmaceutical R&D (NIPRD) in Nigeria has reported to have developed a traditional medicinal product from medicinal and food plants (16). Other herbal medicines for the treatment of sickle-cell disease have been developed by Esoma Herbal Research Institute and Neimeth, based in Abuja, Nigeria. Published data indicate significant clinical efficacy in that a majority of patients were protected from crises, while the frequency and severity of crises were significantly reduced resulting in reduction of hospital visits and increased school and work attendance (16). Published work (17-18) and country reports (19-20) on tests carried out after administration of the traditional medicines in people living with HIV/AIDS for the management of opportunistic infections, showed a decrease in viral load, increase in CD4 and CD8 counts, weight gain, a regain in energy and appetite, improvement of overall clinical conditions and quality of life.

### ***Development of inventories and monographs on medicinal plants and herbal pharmacopoeias***

Benin, Cameroon, Chad, Cote d’Ivoire, Gabon and Mali reported

to have carried out inventories of medicinal plants while Benin, Burkina Faso, Cameroon, Cote d’Ivoire, Guinea, Madagascar, Mali, Senegal and South Africa have developed monographs on medicinal and aromatic plants. However, only Ghana has published the Second Edition of its National Herbal Pharmacopoeia (21) while Nigeria printed a First Edition (22). Experts from ECOWAS Member States are developing the West African Herbal Pharmacopoeia with support from the West African Health Organization (WAHO) in collaboration with the WHO Regional Office for Africa.

## **3 CAPACITY BUILDING**

### ***Inclusion of traditional medicine in training curricula of health professionals***

The Kwame Nkrumah University of Science and Technology in Kumasi, Ghana, established a Bachelor of Science Degree in Herbal Medicine in 2001 to train Medical Herbalists. In Nigeria, some courses in TM in certain universities are being taught to undergraduate and graduate pharmacy students within the context of ethnopharmacology and history of pharmacy. However, the country has recently established a college to offer a degree in complementary and alternative medicine. In 2009, Guinea, Sierra Leone and United Republic of Tanzania indicated

that a Masters Degree programme in traditional medicine for pharmacists and in Burkina Faso a Diploma course were in progress while short courses on traditional medicine have been introduced in the curricula of pharmacy students by some universities in South Africa. During 2006–2007, Ghana, Kenya, Mali and the United Republic of Tanzania field-tested WHO training tools for health sciences students in traditional medicine (23) for university pharmacy students whereas Cameroon, Congo, Democratic Congo, and South Africa did so for medical students.

#### ***Continuing education and skills development programs for Traditional Health Practitioners for PHC***

Burkina Faso, Ghana, Mali, Senegal (PROMETRA International), Uganda (THETA-Traditional and Modern Health Practitioners Together against AIDS) and the United Republic of Tanzania (TAWG-Tanga AIDS Working Group) have reported to have institutionalised training programmes for THPs. Congo, Ghana, Senegal, the United Republic of Tanzania and Uganda field-tested WHO training tools for THPs in PHC (24) for upgrading of their skills.

Effective implementation of WHO training tools will go a long way towards building the capacities of health science students and of

THPs, and fostering collaboration between practitioners of TM and those of conventional medicine. The Ministries of Health in collaboration with THPs Councils or associations of THPs need to intensify their efforts in embarking on continuing education for THPs in PHC.

#### **4 DEVELOPMENT OF LOCAL PRODUCTION AND CULTIVATION OF MEDICINAL PLANTS**

##### ***Cultivation of medicinal plants***

The Republic of Congo and Mali are cultivating medicinal plants while Cameroon, Ethiopia, Ghana, Kenya, Malawi, Mali, Mozambique, Senegal, the United Republic of Tanzania, Uganda, Zambia and Zimbabwe are involved in the cultivation of *Artemisia annua* for malaria treatment. Ghana(2000), Senegal (2002), Zimbabwe (2007) reported to have established policies related to conservation medicinal plants whereas Cameroon and Mali developed guidelines related to the collection and conservation of medicinal plants (2007).

##### ***Local production and commercialization of traditional medicines***

Burkina Faso, Cameroon, Democratic Republic of Congo, Guinea, Ghana, Madagascar, Mali, Nigeria, Rwanda, South Africa and Togo have reported to be locally producing traditional

medicines for the treatment of various diseases. For instance, in 2006, the national medicines regulatory authority (NMRA) in Burkina Faso issued marketing authorizations (MAs) for eleven locally produced traditional medicines including two for malaria (25-26) which have been included in the national essential medicine list (NEML). In 2010 the authority issued another MA for a locally produced plant-based product used for sickle-cell disease. Ghana and Nigeria reported they had issued over 1,000 MAs for locally produced traditional medicines respectively, used for the treatment of various diseases including malaria, HIV/AIDS, diabetes, hypertension and sickle-cell anaemia. Mali reported to have included seven traditional medicines in the NEML including one for malaria (27) whereas in 2005 MAs were renewed in Madagascar for some medicines including for diabetes (28). Rwanda has reported to have produced antispasmodic and antirheumatic medicines whereas Togo has produced medicines for sickle-cell anaemia and hepatitis. However, despite these efforts, governments need to play a key role in scaling up the creation of an enabling policy; economic and regulatory environments for local production of traditional medicines and for development of national regulations.

## 5 INTELLECTUAL PROPERTY RIGHTS (IPRS) AND TRADITIONAL MEDICAL KNOWLEDGE

This is a relatively new subject area and, as a result, only a few countries such as Eritrea, South Africa, Uganda and Zimbabwe, have developed or reviewed their legislation to include the safeguards provided for in the Trade-Related Aspects of Intellectual Property Rights (TRIPS) Agreement. In addition, Cameroon and Ghana have developed a national framework for IPRs in 2007 and 2008 respectively (29) whereas Nigeria and South Africa have developed a Traditional Knowledge Bill (29). Between 2005 and 2007 Mali held a series of training workshops on IPRs and published two books on indigenous veterinary medicine and on African traditional



medicine (30-31) whereas the United Republic of Tanzania held sensitization workshops on IPRs in 2007.

### ***WHO Support to countries for effective implementation of the priority interventions of the Regional Traditional Medicine Strategy***

WHO established a Regional Expert Committee on traditional medicine in 2001 to put in place a Regional mechanism for supporting countries to effectively monitor and evaluate progress made in the implementation of the traditional medicine strategy (32). To facilitate development of national traditional medicine policies, regulatory frameworks for the practice of traditional medicine and implementation plans and to enhance research data on the safety, efficacy and quality, WHO published tools for institutionalizing traditional medicine in health systems (33) and guidelines for clinical evaluation of traditional medicines (34). WHO facilitated the exchange of country experiences, dissemination and utilization of research results (35-38) and assessed the Centre for Scientific Research into Plant Medicine in Ghana (2007) and the Department of TM of the National Institute for Research in Public Health in Mali (2008) in view of their proposed designation as WHO Collaborating Centres (WCCs) in traditional medicine

research. In 2008, the sixty-first World Health Assembly adopted a global strategy on public health, innovation and intellectual property which sets research priorities in traditional medicine whose effective implementation of this research agenda will go a long way to improving access to medicines for the people of the African Region.

Regarding capacity building, WHO promoted the acquisition of knowledge and skills and facilitated the exchange of country experiences on integration and strengthening collaboration between THPs (39), institutionalization of traditional medicine in health systems (40), regulation of traditional medicines for NMRAs (41-42) and hands on training of officials from NMRAs in Ethiopia (2005) and Uganda (2006) at the National Food and Drugs Board of Ghana. WHO developed training tools on traditional medicine and on PHC (23-24) which were field-tested in the countries mentioned above to facilitate the development of training programmes and materials.

WHO in collaboration with the African Initiative and the Centre for Development of Enterprise and Industry of the European Union, carried out joint missions to Benin and Mali in 2001 to provide technical support for local production of traditional

medicines used for sickle-cell anaemia and malaria. Between 2001 and 2005, WHO supported feasibility studies in Benin, Burkina Faso, Democratic Congo, Mali, Nigeria and the United Republic of Tanzania and needs assessment on local production of traditional medicines in collaboration with the African Union's Scientific and Technical Research Commission in Benin, Burkina Faso, Côte d'Ivoire, Democratic Republic of Congo, Ghana, Kenya, Madagascar, Nigeria, South Africa, United Republic of Tanzania and Egypt (2004 and 2006). To support countries in these areas WHO developed a strategic plan for strengthening capacities for local production of traditional medicines (43).

In order to establish mechanisms for the protection of cultural rights and IPRs intended for countries to adapt to their specific situation, WHO developed guidelines (44) and a regulatory framework for the protection of traditional medical knowledge (45), which are complementary to the OAU Model Law (46). WHO will continue to work in close collaboration with organizations dealing with IPR issues particularly the African Union, the African Regional Intellectual Property Organization (ARIPO) and the African Organization for Intellectual Property Rights (OAPI).

## CHALLENGES

Although progress has been made in implementing the regional strategy on promoting the role of traditional medicine in health systems (1), countries have faced some challenges that hamper the "institutionalization" of traditional medicine into national health systems. These challenges include:

- (a) Limited national organizational arrangements for institutionalization of traditional medicine such as the allocation of adequate financial resources for implementation of traditional medicine activities; the establishment of mechanisms for the official recognition of traditional health practitioners; lack of national policies in some countries and limited national strategic plans for policy implementation; and lack of mechanisms of collaboration between practitioners of conventional and traditional medicine;
- (b) Limited research data on the safety, efficacy and quality of traditional medicines; and limited resources for conduct of phase III clinical trials as golden standards for confirmation of safety, efficacy and quality of medicines; and

documentation of traditional medicine practices;

- (c) The majority of countries have not included some aspects of traditional medicine in the curricula of health sciences students and other higher learning institutions; and continuing education training programs for THPs are not structured;
- (d) Inadequate regimes for adequate protection of traditional medicine knowledge and intellectual property rights;
- (e) The majority of countries have not developed national policies on conservation of medicinal plants and engaged in large-scale cultivation of medicinal plants of botanical gardens. Governments have not played their key roles in scaling up the creation of an enabling policy, economic and regulatory environments for small and large-scale manufacturing of traditional medicines.

## THE WAY FORWARD

- (a) Strengthen national multidisciplinary and multisectoral mechanisms to support the implementation of policies and regulatory frameworks and actively collaborate with all partners

- in the implementation and evaluation of the national strategic plans; facilitate effective collaboration between traditional and conventional health practitioners. Countries can adapt WHO tools for institutionalizing traditional medicine in health systems to develop national policies, national regulatory frameworks for TM practice and national strategic plans for implementation of policies.
- (b) Include traditional medicine research and development in the national health research agenda as requested by the Algiers Declaration on health research and produce scientific evidence on the safety, efficacy and quality of traditional medicines and link with health services and policy-makers to facilitate the utilization of research results. Countries should continue to produce scientific evidence on the safety, efficacy and quality of traditional medicines using WHO and other relevant research protocols and guidelines.
- (c) Intensify the integration of aspects of traditional medicine into training programmes by relevant institutions involved in education and training. Countries can adapt WHO training tools in traditional medicine and PHC to their training programmes, syllabi and curricula.
- (d) Develop mechanisms for the protection of intellectual property rights and indigenous knowledge taking into account fair and equitable sharing of benefits of relevant holders, in collaboration with relevant partners. Countries can adapt WHO guidelines and regulatory frameworks for the protection of traditional medical knowledge and access to biological resources to their specific situations.
- (e) Actively promote, in collaboration with all other partners, the scaling-up of cultivation and conservation of medicinal plants for ensuring sustainability of raw materials for research and local production of traditional medicines. Play a key role in scaling up the creation of an enabling policy, economic and regulatory environments for small and large-scale manufacturing of traditional medicines.
- (f) Foster strong Regional and sub-Regional collaboration in information exchange; play a key role in allocating and mobilizing adequate resources and strengthen capacity-building, equipment and other laboratory facilities in collaboration with the private sector.

## CONCLUSION

The traditional medicine situation in the African Region shows important differences between the countries in the degree of organization and integration of traditional medicine into mainstream health systems. It can be concluded that while some countries have no structures in place, others have considerable organization and integration is being achieved. However, countries need to implement the above-mentioned recommendations to mitigate some of the challenges. On its part, WHO will, among other things, continue to advocate for and stimulate the development and implementation of tools for institutionalizing traditional medicine in health systems; advocate and mobilize additional resources for supporting countries to conduct and share research results; and to develop local production of standardized traditional medicines for inclusion in national essential medicines lists; and promote the acquisition of knowledge and skills by facilitating the exchange of experiences; and the development of training programmes and training materials; and work with relevant partners in supporting countries to document and protect traditional medicine knowledge. 🌱

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