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## **REPORT OF THE IBC ON TRADITIONAL MEDICINE SYSTEMS AND THEIR ETHICAL IMPLICATIONS**

UNESCO's International Bioethics Committee included the subject of traditional medicine in its work programme for 2010-2011. A working group was set up and asked to consider the ethical implications of these widespread and highly varied practices, avoiding any overlap with the research being carried out by other United Nations bodies and agencies. In addition, relations were established with internal and external sources for consultative purposes.

Internally, exchanges took place with the Member States of the Intergovernmental Bioethics Committee (IGBC) at the joint session of IBC and IGBC, and the 7th Session of IGBC, held at UNESCO Headquarters in October 2010 and September 2011 respectively. At IBC's 17th Session, in October 2010, experts from UNESCO's Natural Sciences Sector and Culture Sector were also invited to present their points of view on the matter.

Externally, traditional medicine practitioners from different parts of the world were invited by IBC to take part in its 18th Session, held in Baku in May-June 2011, and they enriched the discussion by presenting their own experiences and viewpoints.

A draft version of the report was discussed by IBC members in the first months of 2012. The report was submitted at the 19th Session of IBC, held at UNESCO Headquarters in Paris on 11 and 12 September 2012, so that the possible follow-up to it could be studied. Consequently, based on the comments received during the 19th Session, the Committee revised and finalized the report in January 2013.

This document, which is neither exhaustive nor prescriptive, does not necessarily represent views of UNESCO's Member States.

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# TRADITIONAL MEDICINE SYSTEMS AND THEIR ETHICAL IMPLICATIONS

## 1. INTRODUCTION

Traditional medicine lies at the crossroads of two different types of skills, values and responsibilities. It is a kind of medicine, as traditional practitioners – to use the terms of the 1978 Declaration of Alma Ata – must be included as health workers who are called upon “to respond to the expressed health needs of the community”, in the same way as physicians, nurses, midwives, auxiliaries and community workers, on the basis of suitable training. At the same time, traditional medicine – as is explicit in the definition adopted by the World Health Organization – aims to perform the task of maintaining health as well as the prevention, diagnosis, improvement or treatment of physical and mental illness, using knowledge, skills, and practices based on “the theories, beliefs, and experiences indigenous to different cultures”. As set out in Article 27 of the Universal Declaration of Human Rights “Everyone has the right freely to participate in the cultural life of the community, to enjoy the arts and to share in scientific advancement and its benefits.”

**As medicine, the activity of traditional practitioners must meet requirements appropriate to this practice, starting with safety, effectiveness and quality. This system of knowledge, skills and practices is supposed to help improve health outcomes, including physical, mental and social well-being.**

**As a practice based on theories, beliefs and experiences belonging to different peoples, traditional medicine has been used in some communities for hundreds if not thousands of years. It is sometimes perceived as a fundamental element in these communities’ identity and often closely intertwined with lifestyles, cultural framework and social regulations, and can be subject to domestic legislation.**

The IBC’s work on the ethical implications of traditional medicine is directly linked to UNESCO’s mission to promote cultural diversity. The *Convention on Biological Diversity* (1992), the *UNESCO Universal Declaration on Cultural Diversity* (2001), the *Convention for the Safeguarding of the Intangible Cultural Heritage* (2003) and the *United Nations Declaration on the Rights of Indigenous Peoples* (2007), define the parameters which should be used to understand and address traditional medicine. This may be accomplished if, and only if, two lines of thought are taken into consideration. Two principles from the *Universal Declaration on Bioethics and Human Rights*, adopted by acclamation by the UNESCO General Conference in 2005, are essentially at stake here: on the one hand, the right of every human being to enjoy “the highest attainable standard of health” (Art. 14); on the other, the explicit need to respect “cultural diversity and pluralism” (Art. 12), which includes “respect for traditional knowledge” (Art. 17).

These two principles must be upheld together and with the same force. However, tension may arise in their application; in some cases, establishing priorities between them is unavoidable. Geographical diversity and the variety of practices are both an advantage and a challenge. The concept and practice of traditional medicine occur in different contexts and as a result it is highly difficult to attain a unified approach and language in the matter. Nevertheless, despite this complexity, the broadest possible approach should be promoted owing to the importance of traditional medicine in developing countries, and its rapid growth in more developed countries, albeit with different features and roles. This kind of approach requires not only a commitment to reaffirming the pivotal role of traditional knowledge worldwide, but also the capacity to provide some essential guidelines so as to protect users and prevent any possible risk of discrimination and exploitation.

## 2. GENERAL CONSIDERATIONS

### 2.1 Definitions

The World Health Organization (WHO) defines traditional medicine as “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” (WHO, 2000a). In fact though, traditional medicine is a concept that reaches far beyond the field of health to the broader level of society and culture, religion, politics and the economy. It could be said that there are almost as many forms of traditional medicine as there are cultures.

The manifold forms of traditional medicine, which differ according to the region of the world, country and even area within a country, constitute both an asset and a challenge. By way of example, while African and Latin American traditional medicine is strongly marked by an oral tradition, even though training exists in various forms (from self-education to teaching by an expert practitioner), Chinese traditional medicine has more structure and documentation.

The expression “complementary and alternative medicine” defines in general a set of health care practices that is not part of a country’s tradition and is not integrated in the health care system, and which must not be confused with traditional medicine as cultural heritage, which constitutes the subject of this report.

#### **About the choice to refer to modern medicine in this report (in comparisons with traditional medicine)**

The Committee looked carefully at the question of the term to be used to describe medicine that is often said to be scientific, Western, conventional, orthodox, allopathic, and so on. Each of those denominations has some merit, but it was important to select a word that, while clear, did not imply *a priori* value judgments, and would not be likely to raise reservations in the sense that it might seem to attribute this kind of medicine to one society or part of the world rather than to another. There follow the reasons behind our choice from a number of options:

- **conventional medicine:** this term is used in some WHO publications. The adjective has different meanings, though: it can refer to a formal convention (in international law, for instance), or an informal convention (socially, it is agreed that a certain practice is the most broadly accepted or most widespread). In both meanings, reservations may be expressed as to the adjective. Who had established a convention in its respect? In the societal sense, can this medicine be considered to represent a convention, regardless of the society? Moreover, there is another disadvantage: in everyday language (in French and English in any case) it can also mean banal, ordinary, in a pejorative sense.
- **orthodox medicine:** arguments comparable to those above may be used. Orthodox (the “right path”) would refer to a “legitimacy” that is not achieved strictly speaking in the field with which we are dealing. Furthermore, the adjective also applies to specific movements within major religions and it is essential here to avoid any confusion.
- **Western medicine:** the fact is that today’s medicine was largely developed by researchers and clinicians living in the West. However, it has spread across the world and is practiced and recognized everywhere. It may also be noted that, in any event as regards semiological observation and certain principles (of professional ethics and organization, for example), this kind of medicine is descended from other medicines (Greek, Arab, eastern). More generally, it would be unsatisfactory to seem to be attributing it to one part of the world rather than to another.

- **scientific medicine:** for the most part probably, modern medicine claims to be based on science. For 30 years now, much has been said and written about evidence-based medicine. However, there is general agreement now that the expression has a limiting side, that quality health care is not confined to the application of “scientifically tested” techniques or medication. The terminology of scientific medicine would not do justice to entire areas in modern medicine relating to psychosomatic, functional and psychosocial registers and the field of human relations.
- **allopathic medicine:** is a term essentially used by practitioners of homeopathic medicine to describe medicine treating factors of illness by means that oppose them. It is rarely used outside this context, therefore it will also not be used in this document.
- **modern medicine:** the broadest consensus was reached on this term, which the Committee selected. The following reasons were decisive: most of the scientific and technical discoveries regarding this kind of medicine were made in the modern era (the past two centuries). Some members considered that it was questionable to “contrast” the terms modern and traditional, but we do not consider it to be the case: the meaning of “traditional” here seems quite clear to all and “modern” refers to a period, recent history, and does not imply any value judgment. Furthermore, we do not consider that it would suggest that more credit was given to one type of society or one part of the world.

Accordingly, in the present report, which refers in any event to the application of universal ethical principles to traditional medicine as practiced in its different cultural contexts, the word modern is used. It is understood that this kind of medicine aims to be science-based – or science-oriented – but that it is not entirely defined by this characteristic.

## 2.2 Traditional knowledge

Traditional practices are based on a holistic approach to the human being within the wider environment, and this is also reflected in the type of knowledge to which they refer, the debate surrounding their origins, their usage patterns and transmission modes. Traditional medical knowledge and its application can be highly codified and systematized, sometimes even institutionalized, with the result that it is transmitted by public medical institutions or jointly by health institutions and families or specialist lineages. In some countries, traditional medical knowledge remains localized and its dissemination is limited, thus conserving an informal aspect that accrues from the accumulated experience of a particular lineage of healers. It is often kept secret, being mainly transmitted orally, as pointed out above. It can also combine natural and supernatural resources, and be deemed to be acquired at birth or through a gift or special revelation to certain initiates.

In some developing countries, between 60% and 90% of the population use traditional medicine for primary health care (WHO, 2002a). In most cases, this is either because they have no alternative, since other, generally more expensive types of treatment are not readily available; or because of cultural traditions. If people in developing countries are turning to this type of medicine, it is mainly because it is near at hand, readily available, affordable and compatible with the traditional culture or ethnic group.

However, traditional medicine is also spreading significantly in some industrialized countries as people become disillusioned by modern medicine and lose confidence in it. In this context, the term “traditional medicine” is often used to refer to a variety of health care practices that are set apart because they differ from the methods and treatments normally taught in medical schools, or because they are deemed to be “exotic”, having been isolated from the cultural context of their countries of origin. In these countries, traditional medicine is often referred to as “complementary and alternative medicine” (CAM). In some developed countries, between 70% and 80% of the population have used CAM (WHO, 2008b), either because they are convinced that this type of

treatment is more “natural” and therefore “risk-free”, or as an adjunct to treatment for a chronic, debilitating or incurable disease.

This increased usage also stems from the wide range of “therapies” covered by the concept of traditional medicine, ranging from medication to manual treatments such as massages, to psychological or spiritual therapies, such as meditation or prayer, which aim to maintain or restore the balance between the physical, psychological, environmental and cosmic elements that may impact on health. Many attempts have been made to classify them.

The treatments used in traditional medicine can be divided into three categories based on the methods used in healing and/or maintaining health:

- *medication therapies* using herbal medicines and/or medicines derived from animal parts and/or minerals;
- *non-medication therapies* using manual (e.g. massage), physical (e.g. qigong, t'ai chi ch'uan), mental (e.g. meditation, hypnosis) and spiritual (e.g. religious-magic) methods of treatment or a combination of these methods (yoga);
- *mixed therapies* combining medication and non-medication therapies.

### **2.3 Incorporation into national health care systems**

Depending on the level of usage in health care systems, traditional medicine can be classed as integrated, included, tolerated, or excluded or prohibited.

- ***Traditional medicine that is a recognized, integral part of health care systems***

In a number of countries, traditional medicine is a recognized, integral part of health care systems and is one of the care options on offer. Very few countries can be said to have reached this level. In China, for example, this system was developed in the 1950s in order to marshal all health care resources towards meeting the national objective of achieving a comprehensive primary health care system. Traditional Chinese medicine was incorporated into the national health care system by providing academic training and emphasizing research. Today, traditional Chinese medicine is taught in universities and local medical schools as part of a mixed curriculum. In traditional Chinese medical schools, 60% of the curriculum is devoted to traditional medicine and the remaining 40% to modern medicine.

- ***Traditional medicine that is recognized, but not an integral part of health care systems***

Some countries recognize traditional medicine, but it is not fully integrated into the health system (health care provision, education, training, regulations). In India, for example, the first step towards recognition of traditional medicine came with the adoption of the Indian Medicine Central Council Act in 1970, with a mandate to standardize training, establish accredited research institutions and monitor standards for training and practice in this type of medicine.

- ***Tolerated traditional medicine***

In a tolerant system, only modern medicine is recognized and traditional medicines are not referred to in national health care programmes, which means that their existence and role are virtually ignored and the official health care system relies exclusively on modern medicine. They are, however, tolerated by the authorities, which adopt a sort of “laissez-faire” approach, leaving them to develop outside the control of the State. There is no professional register, no licensing procedure and no disciplinary system for traditional medicine practitioners, and research and training in this field is not promoted.

➤ ***Exclusive or monopolistic systems***

In an exclusive system, only modern medicine is considered appropriate and traditional medicine is either explicitly forbidden or officially repressed.

### **3. TRADITIONAL MEDICINE IN PRACTICE**

The following overview of traditional medical practices, which follows UNESCO's regional categorization, is far from exhaustive. It aims to give an idea of the type of practices that are covered by this category, their theoretical approach to health, the importance that they have for the people that rely on them, and governments' position and attitude towards them. Since WHO is tasked with monitoring the status of traditional medicine around the world, international journals and reports published by WHO are useful references for further reading (WHO, 2001; WHO, 2005).

#### **3.1 Arab world**

The dominant traditional medical system in the Arab world, also known as Islamic traditional medicine (and which is also prevalent in other countries such as the Islamic Republic of Iran), is a highly codified, systematized form of ancient Hippocratic medicine developed by Muslim herbalists, pharmacologists, chemists and physicians during the medieval period. Therapies used in Islamic medicine range from herbal medication to phlebotomy (a vein incision made at a specific time in the Islamic lunar calendar) to spiritual practices such as praying. In this tradition, knowledge is transmitted orally and on an individual basis, although some countries are now including traditional medicine in the curriculum in their modern medical schools.

Other traditional health practices in the Arab region, especially in the Maghreb countries, intermix Islamic and local popular beliefs. Here, the human body is seen as a harmonious divine creation, highly exposed to the risk of disease. These diseases are believed to be caused by an individual's social relationships or are attributed to infractions of social or religious rules, a sorcerer's curse or the evil eye. Healers resort to divination to identify the cause of the problem and the particular spirit believed to be behind the illness. Therapies consist of herbal preparations combined with the performance of rituals designed to appease the deity concerned or expel the agent responsible for the complaint. They only pass on their knowledge orally, and to selected individuals.

The countries of the region have sought to regulate the use of medicinal plants. Some countries have established policies, regulations and bodies to assess the efficacy of traditional medicinal teachings in preventing and treating disease and to highlight the benefits of including them in national health care systems. In other countries, popular use of traditional medicine has not translated into any specific policy measure; consequently, traditional medicine is not an integral part of the national health care system and there are no national policies to regulate its practice.

#### **3.2 Africa**

In Africa, traditional medicine is based on theories that see human beings as inseparable from their social, natural, spiritual and cosmic environment. According to this holistic approach, disease is considered and treated as a phenomenon that arises when an imbalance affects the vital powers governing the patient's health; these powers range from the most powerful deity to the smallest living organism. To restore harmony, the healer combines local plants and minerals – chosen both for their medicinal properties and their symbolic and spiritual significance – with ritual actions, and calls on his or her in-depth knowledge of the patient's kinship and social relations, as well as common local cosmologies. The diviner and the traditional healer are the key figures in traditional medicine in Africa. The diviner diagnoses the cause of an illness if a supernatural intervention is suspected. Extensive knowledge of the village's kinship relations, social connections and current potential conflicts is the main tool in the diviner's armoury. The traditional healer chooses and applies appropriate remedies; this is usually a very powerful person with connections, highly respected throughout the community, who enjoys a certain amount of political power deriving

indirectly from the ability to act on disease and on the supernatural powers involved. The traditional healer's right and ability to heal are considered to be a gift from God and the ancestors, and this is often recognized in specific childhood acts. Midwives (sometimes called "matrons" to distinguish them from the midwifery of Western medicine) and bone healers are also much in demand as practitioners of traditional medicine in African countries. Given that the vast majority of the African population uses traditional medicine as the primary, if not the only source of health care, some countries in the region have been particularly keen to assess its results. Several countries are currently drafting a legislative and legal framework based on national policies and regulations. Some countries, for example, have national programmes in place and have adopted the relevant legislation and regulations. On the other hand, other countries have so far undertaken little, if any, national-level action.

### **3.3 Asia and the Pacific**

In Asia, traditional medicine has achieved a very high degree of recognition, with some countries having a health system that combines modern medicine and traditional medicine, whereas in other countries, despite both types of medicine being considered to be on an equal footing, they are practised separately. Traditional medicine in this region is highly systematized; its practice is underpinned by a complex theoretical framework that provides conceptual and therapeutic guidance, a long history of use and a popularity that is often seen as further proof of its efficacy.

In China, medical practices such as acupuncture, moxibustion, herbal medicine, cupping and certain exercise techniques are regarded as integrative therapies that aim to restore harmony and balance to the human body, which is viewed holistically. Chinese traditional medicine is based on the following interlinked concepts: the yin/yang complementary aspects of the whole, the former being considered as a negative state associated with cold, darkness, stillness and passivity, and the latter as a positive state associated with heat, light and vigour; the five phases or elements (wood, fire, earth, metal and water); the three treasures of the human body (essence, qi energy, mind/spirit) encompassing both tangible and intangible elements within the body; the zang/fu organs (solid/hollow) which create, transport and store the essence as well as draft of water and grain, and the meridians or channels that link together all the fundamental elements and enable energy and blood to flow throughout the body. Being an integral part of national plans for comprehensive health care services for the vast population of China, traditional medicine has been approached from a scientific perspective, with the focus on research into its treatment methods. Consequently, it is now fully integrated across all levels of health care provision. Some 95% of Chinese hospitals currently have traditional medicine departments.

In India, Ayurveda ("science of life") is the country's most widely practised and acknowledged traditional medicine. It includes several specializations: general medicine, paediatrics, psychiatry, otorhinolaryngology, surgery, toxicology, geriatrics and aphrodisiacs. Disease is considered to be a consequence of psychophysiological and pathological changes in the organism due to an imbalance between three bio-energies. Therapies aim to restore balance by re-establishing the coordination between the patient's body, mind and consciousness. This is either done with purification treatments (using medical oils, purgatives, enemas or bloodletting) and soothing treatments (herbal therapies to strengthen the immune system, and rejuvenation therapies), which are complemented by yoga, meditation, prayers and chanting. In 2003 the Indian Government established the AYUSH (Ayurveda, Yoga, Unani, Siddha and Homeopathy) Department, which is tasked with developing AYUSH educational standards and research, quality control and standardization of drugs used in traditional medicine, and raising public awareness about its relevance. Today, Ayurveda is practised alongside modern medicine in around 3,000 hospitals and 20,000 dispensaries. It also has its own dedicated health care and research centres, and is taught in about 400 undergraduate and postgraduate colleges.

In Japan, traditional medicine (known as "kampo") enjoys the support of the national health care system and most herbal preparations prescribed for kampo treatments are covered by medical insurance. In Indonesia, traditional medicine has been an integral part of curative medicine and



nursing care delivery since 1992. The country's Health Law calls for forms of traditional medicine that have proven safe and efficacious to be developed further, while emphasizing the need for supervision to ensure their safety and efficacy. In Malaysia, traditional medicine is also an integral part of the national health care system, but a self-regulatory approach is used: five umbrella organizations representing the country's most commonly used forms of traditional medicine have been established and are responsible for recognizing, accrediting and registering practitioners, as well as developing standardized training programmes, guidelines, standards and codes of ethics.

In the countries of the Pacific, the approach to traditional medicine is somewhat different. In countries such as Australia, Samoa and New Zealand, traditional medicine plays a lesser role – if any – in national health care delivery systems. In the South Pacific islands, on the other hand, healing is closely associated with two fundamental Polynesian concepts: *tapu* (ritual prohibition and restriction) and *mana* (an impersonal force or quality that resides in people, animals and inanimate objects), both related to the spirit world. *Mana* is the divine power that enables traditional healers to treat diseases that are considered to be of supernatural origin. This power is passed on ritually from generation to generation within specific families. Traditional healers only treat diseases that are considered to be endemic to the region (as opposed to those that are perceived to have been imported by Westerners), which are mainly spiritual in nature, but can also include physical injuries and internal and metabolic disorders. Spiritual ailments are considered to be the result of interaction with the spirit world, which sends love, anger and pain to specific individuals according to their worldly and spiritual needs. Healing methods include the use of herbal medicines, massages, rituals and incantations.

### **3.4 Latin America and the Caribbean**

Traditional medicine in Latin America and the Caribbean is a mosaic of diverse practices associated with the many indigenous groups living in the region, as well as the beliefs and practices of millions of migrants from all parts of the world. The landscape of traditional medicine in the region is characterized by relatively isolated systems, which exist alongside other mixed medical traditions that have been strongly influenced by European colonial medicine.

Traditional medical practices in Latin American and the Caribbean are based on notions that establish a close link between human health and the health of the ecosystem, both physical and spiritual. Health thus depends on the continuous availability, both in quantitative and qualitative terms, of specific resources from the ecosystem such as plants, animals and animal products, ritual objects, as well as seasonal odours, sounds or landscapes. In the Andean region, for example, traditional healers believe that nature and the human body consist of a cycle of opposing moods (hot/cold and wet/dry), whose succession creates a pendulum rhythm. Human and environmental health are both defined as the continuity of this cycle in relation to the body, the mind, the nine levels of the soul and the earth, conceived as Mother.

Indigenous healers enjoy a powerful position within their local communities; their knowledge, stemming from a centuries-old observation of nature, is often kept secret and either transmitted orally to selected individuals or initiates, or to those believed to have been designated by a supernatural being. The healers combine an extensive pharmacopeia with ritual practices to jointly restore bodily and spiritual balance, which has been disturbed by harmful general processes. Some plants, such as the coca or the tobacco leaf, are also used ritually. The most common traditional medical specializations in the region are bonesetting (to treat dislocations, fractures and fissures), obstetrics (prenatal, childbirth and postnatal care), herbal healing, massage (especially a type of friction massage to warm the body) and spiritual healing.

Modern medicine is regarded as the standard of care in Latin American and Caribbean countries, but health systems coverage varies greatly from country to country. With the expansion of public health care networks, most local people are increasingly likely to use some of the modern treatments while remaining faithful to their own traditional medicine. However, owing to various factors such as geographical and social distance, poverty, language barriers and cultural

differences, a large majority of the indigenous population of the region – as is unfortunately the case in many other regions of the world – is deprived of access to modern health care.

### **3.5 Europe and North America**

Modern medicine is the cornerstone of health care systems in Europe and North America. However, people in these countries also have access to traditional and alternative treatments. The growing interest in non-indigenous traditions and knowledge and in some ancient treatments of local origin is thus all the more significant. These include herbal medicine and its complex pharmacopoeia with its wide range of preparations using leaves, herbs, roots, bark and other plant and mineral substances. To promote this knowledge, several herbal practitioners' associations have been established in countries such as the United Kingdom, Ireland and Denmark. In 1993, these associations joined the European Herbal and Traditional Medicine Practitioners Association (EHTPA), which aims to foster unity, raise training and practice standards within the profession, and obtain official recognition and legalization throughout the European Union.

European governments have been actively involved in putting in place the regulations needed to guarantee the safety, quality and efficacy of the herbal medicines available in their countries. The Traditional Herbal Medicinal Products Directive (THMPD), adopted by the European Union in 2004, made pharmaceutical registration mandatory for herbal medicines, with a view to prohibiting non-authorized products from 2011 onwards. Since registration involves meeting a number of eligibility criteria and technical procedures, as well as high costs, the Directive has led to a considerable reduction in the number of herbal medicines available on the European market, thus restricting local traditional health practitioners' options for their patients. However, implementation of the Directive is left to the discretion of the individual countries, which means that there are differences from one to another, depending on the way herbal medicine is defined in national legislation.

With the exception of regulations covering herbal medicines, there is still no coherent, detailed set of policies and legislation to regulate traditional medicine practices in Europe; this is especially the case for traditional practices from other regions of the world, for which usage is increasing steadily. In most Western European countries, the practise of traditional medicine by anyone who has not been trained and licensed by a publicly-recognized institution is either illegal (France, Luxembourg), ignored by the legislation (Ireland, Malta, United Kingdom) or excluded as a possibility (see the guidelines adopted by the Italian Medical Association in 2009). Other countries such as Hungary, Israel, Norway, Belgium, the Russian Federation and Turkey have taken steps to put in place legal instruments and clear rules governing practitioner training, the conditions in which these therapies may be used, and to define the legal scope within which they may be practised.

In the United States and Canada, modern medicine is also the main institutionally-established form of health care provision, but some room has been made for traditional medicine. It is important to emphasize that in this part of the world, traditional medical practices which are embedded in the culture and life of the indigenous peoples of the continent, such as those of the American Indians, the First Nations, the Inuit and the Métis communities, still survive. A common feature of these practices is their holistic approach to health, based on the interrelationship between physical, mental, spiritual and emotional aspects, which are seen as integral parts of individual and community health. These interrelationships are in turn related to environmental and social health determiners, such as education, housing, economic status and social capital. In treating their patients, traditional healers use a wide range of therapies, including herbal preparations, ritual purification, purges, blood purification, burning of certain herbs, as well as chanting and prayers. The healers' powers are said to be either inherited through their lineage or gifted by a protective spirit following an "initiation" that involves suffering and recovering from a serious illness. An important feature of the traditional medicine of the Canadian First Nations, Inuit and Métis is the idea that everyone – from before birth until after death – is connected with a specific spirit, which is identified by a name and a colour. The only way to understand the root cause of a person's illness and how to restore him or her to health is believed to be by communicating with this spirit.

North American traditional medicines are not in the public domain and are protected by the specific communities to which they belong. These communities have established their own health care facilities, harnessing their ancestral medical heritage. However, action has also been taken at government level. In Canada, a whole range of national, provincial and territorial health policies, strategies and initiatives have been put in place to promote and improve access to traditional medicine for indigenous communities, while ensuring access to modern medicine is available for all those who want or need it. In the United States, traditional medicine became legal with the American Indian Religious Freedom Act in 1978, which gave indigenous communities the right to exercise their own religions and attendant practices, including medical practices. Today, several medical schools offer training in American Indian traditional medicine and several hospitals use traditional healers to complement their treatment of aboriginal patients.

#### **4. ETHICAL AND POLITICAL CHALLENGES**

Traditional medicine seems to offer much by way of both potential benefits and possible disadvantages, but proper assessment is difficult in terms of modern medicine, since each branch of medicine rests on different conceptions of the world. The traditional approach to establishing cause of illness is based on dual causality: an illness is thought to be due to both natural and supernatural/spiritual causes. In most cases, health is seen as a state of equilibrium between a number of factors – a balance arising out of the interdependence between human beings and their social, natural and supernatural environment. These differences in the way health is viewed mean that definitions of illness also differ enormously. In this respect, traditional medicine will have to surmount a number of challenges if it is to be recognized and integrated into the health system. Among these challenges, the World Health Organization includes the following: official recognition and diversity of practice, inadequate scientific evidence of the efficacy of a large number of traditional therapies, problems protecting traditional knowledge, and lack of resources to ensure that it is used properly (WHO, 2002b). The answers are to be found not only in policy and regulation but also in the technical sphere, relating to safety, efficacy, quality, access and rational use.

Translation of indigenous concepts of illness into biomedical terms would undoubtedly be difficult but would be the best way of encouraging productive dialogue between modern and traditional medicine and providing deeper insight into traditional treatments in their cultural contexts. It would also offer new scope for discussion and action, ranging from bioactivity screening of medicinal plants to health provision initiatives for indigenous communities.

##### **4.1 Potential benefits and advantages**

Common use of traditional medicine may arise from lack of access to modern medicine, but it may also be the result of genuine demand, as demonstrated by the fact that even in industrialized countries roughly half the population also resorts to non-modern forms of medicine. There are various reasons for this:

###### **➤ *Availability and proximity***

In many developing countries, traditional practitioners far outnumber doctors practising modern medicine, the latter being distributed very unevenly and mainly concentrated in cities. In Africa there may be one traditional practitioner for as few as 200 inhabitants, whereas some areas have only one doctor for 50,000 inhabitants. In other parts of the world, this difference might be smaller but nonetheless significant. The ready availability of herbal preparations in rural areas also suggests this type of treatment for many illnesses. Because of the availability of traditional practitioners and the scarcity of doctors, the former are the de facto primary care providers, especially in rural areas.

The social and geographical proximity of traditional practitioners is one reason why they are chosen as intermediaries to supervise local programmes that combine both the concepts and

the practice of modern medicine. In East and sub-Saharan Africa, for example, traditional practitioners offer spiritual healing and herbal treatments; they also provide social, practical and psychological support to patients' families. Traditional practitioners are further reported to play an effective part in encouraging patients to continue with long-term treatment.

With the increasing use of traditional medicine worldwide, various health care professionals are offering accredited services in this field as part of national health care systems and covered by national legislation. Traditional practitioners are generally understood to include traditional healers, bonesetters, herbalists, etc. Traditional medicine providers can be either traditional practitioners or modern medicine professionals such as doctors, dentists and nurses who also provide traditional care or CAM therapies to their patients (many doctors prescribe herbal remedies and make use of acupuncture; pharmacists dispense herbal remedies if the latter are classified as prescription drugs (WHO, 2002a,b; WHO, 2004a,b)).

➤ ***Affordability***

In many developing countries traditional medicine is the only form of affordable health care for the poorest sections of society, to whom modern medicine is unavailable mainly for economic and geographical reasons. In its *World Health Report 2000, Health Systems: Improving Performance*, WHO points out that in Ghana and Kenya a course of modern antimalarial treatment is equivalent to total per-capita out-of-pocket health expenditure for a whole year (WHO, 2000b). Thus malaria is treated with cheap and readily available herbal medicines that can be paid for in kind and/or according to the patient's resources. Clearly the basic issue is, on the one hand, affordability of medicines that have been tried and tested and, on the other, proof that the more affordable therapies used in traditional medicine are effective. Governments are urged to ensure that a genuine choice is available.

➤ ***Familiarity and cultural acceptability***

Practitioners of traditional medicine share their patients' culture as well as the same view of health and illness and the same general conception of the human organism as it relates to the broader environment. They therefore "speak the same language" as the general public and use the same frame of reference for health. In African countries especially they also perform other roles – as carers, health educators, family counsellors and community therapists – and even a wider role in the community as priests, specialists in ritual, soothsayers, teachers, moral and ethical guides and community leaders. This shared knowledge explains why local communities consult traditional practitioners and also plays a part in patients' acceptance of diagnoses and treatment and their trust in their practitioners.

➤ ***Effective treatment of particular disorders***

In many countries traditional medicine is the preferred treatment for mental disorders connected with psychosocial problems. Moreover, it seems that traditional Chinese and Indian medicine can achieve lasting positive results in treatment of some chronic conditions such as rheumatism and metabolic, neurological and behavioural disorders. Promising examples from India, Africa and Latin America also show that traditional medicine can be used successfully to achieve complete relief from signs and symptoms such as abdominal pain, diarrhoea and jaundice and to reduce the incidence of malaria significantly through preventive herbal medicines.

➤ ***Holistic and person-centred approach***

Traditional medicine approaches health and disease holistically, providing personalized care centred on the patient and specifically aimed at meeting his or her needs and expectations. It views the individual as a whole, taking into account not only the patient's mind and body but also his or her place within the family unit, society and the cultural environment.

### ➤ **Protection of biodiversity**

Medicinal plants are a key element of traditional therapies, and detailed knowledge of these plants is handed down from generation to generation by traditional practitioners. This makes these practitioners protectors and custodians of the biological resources that they need if they are to practise sustainably.

Herbal materials are obtained from wild plants or cultivated for medicinal purposes. Growth in the medicinal plant market could lead to overexploitation of plants, threatening biodiversity. Mismanaged gathering or cultivation could result in the extinction of some species and the destruction of natural resources. A successful effort to preserve both plants and knowledge of how to use them medicinally is required in order to protect traditional medicine (WHO, 2008b).

These arguments for traditional medicine must be closely scrutinized. Poverty and illiteracy may be factors of discrimination, and therefore availability and affordability of treatment cannot be seen as “benefits” if they stem from lack of access to better treatment. Familiarity and cultural acceptability are no substitute for the efficacy and safety, whatever is the medicine in question.

The principle of biodiversity protection and traditional medicine’s person-centred approach should no longer be considered “alternatives” to modern medicine, since ethics regards both of them as essential to the practice of medicine as such.

## **4.2 Basic issues**

Fair assessment of benefit and harm (Universal Declaration on Bioethics and Human Rights, Article 4), adequate information for the person concerned in order to respect the principles of autonomy and prior, free and informed consent (Articles 5 and 6), access to quality health care and essential medicines (Article 14) and sharing of benefits (Article 15) are all instrumental in promoting the right of every human being to enjoy the highest attainable standard of health. They are the cornerstone of any practice that professes to be medicine.

### **4.2.1 Autonomy and individual responsibility**

Respect for personal autonomy is bound up with the concept of human dignity, from which, in some interpretations, it is derived.

The principles of autonomy, informed consent and respect for human dignity are inseparable. Thus autonomy implies responsibility on the part of the patient, who must receive precise information as to the consequences of his or her choice. This is a right to relevant, organized and comprehensible information.

The interrelationship between autonomy, responsibility and consent also implies that the patient’s faculties are such that he or she is able to measure the consequences of the disease and its course and has understood the benefits and disadvantages of the proposed treatment and any alternative treatments.

A person’s ability to exercise autonomy is subject to limits (see IBC report on consent). In this respect there is a lack of clarity regarding arrangements for applying the principle of autonomy in various practical situations.

Respect for autonomy is a two-way process. Consequently, it is not a vested right but entails an element of shared responsibility. Article 5 specifies that individuals have the right to make their own decisions but must also respect the autonomy of others, i.e. all the other people involved.

The principles of autonomy and consent are bound up with the principle of non-discrimination and non-stigmatization (Article 11). Any offer of medical treatment, whether modern or traditional, must

recognize the right to difference. What is true for the individual is also true for particular situations in which the illness is a problem involving a family or group and the individual is not considered solely responsible for any decisions to be made.

As pointed out in earlier sections, traditional medicine comes in all shapes and sizes. Nor is it limited to diagnosis and treatment. It implies a specific approach to life, death, health and illness. It entails a different view of the patient, practitioner, patient/practitioner relationship, health services, risk factors, etc. On the other hand, where medical practice is an integral part of a group's culture, where the patient is a "social fact" whose treatment involves the group, and where the traditional practitioner plays a key role in the community, application of the principles of autonomy, individual responsibility and consent presents a challenge. This can be met only by critical recognition of beliefs and traditions.

In modern medicine, the relationship of trust and sometimes also of subordination between patient and doctor is still a challenge to exercising autonomy. In the relationship between patients and traditional practitioners, the situation may be even more complicated, particularly with traditional spiritual practice. In this case there is a risk that the symbolic aspect of the relationship may break down, which could weaken or destroy its therapeutic effect. There are real difficulties in applying the principles of autonomy and consent in spiritual medicine, but they should not prevent us from enforcing these principles in this and other types of traditional practice. This fact should not be a barrier to developing ethically reliable procedures sensitive to cultural aspects. One answer to the situation is to ensure that the community is closely and permanently involved in implementing appropriate solutions and participates in research into traditional medicine (e.g. research into medicinal plants). Such research must observe the same rules and rigour as research into modern medicine, since there is a considerable risk that it may take advantage of subjects' beliefs.

#### **4.2.2 Safety**

A medical practice must be subject to safety and efficacy requirements. Traditional medicine, like modern medicine, has to meet these requirements. It is incumbent on practitioners to have a good knowledge of the properties of different products and plants as well as their beneficial and adverse effects on individuals of different ages and sexes in various conditions.

Improper use of some herbal materials is a potential source of danger. The common misconception that natural products are not toxic and have no side effects may lead to unrestrained intake resulting in severe poisoning and acute health problems. This misconception also exists in highly developed countries, where the general public often resorts to "natural" products without being properly aware or informed of the associated risks, particularly in the event of excessive use. Loyalty to tradition does not give practitioners licence to use little-known, dangerous or harmful practices.

Quacks are another challenge peculiar to traditional medical practice, since there is no recognized regulation and it is often hard to tell genuine traditional practitioners from those likely to do harm, both physically and psychologically, to the patients they are professing to treat. These self-styled healers actually do serious damage to the image of traditional medicine as a whole.

Various forms of traditional medicine are increasingly being practised outside their original areas and cultures, without adequate knowledge of their use and underlying principles. Thus traditional products may be used in different doses, obtained by different methods or employed for non-traditional purposes. Use of traditional medicine concomitantly with other forms of medicine, which can be commonplace, has become a concern in terms of therapeutic safety (WHO, 2004a,b).

#### **4.2.3 Assessment of efficacy and quality**

Here a distinction must be drawn between drug therapy and spiritual therapy. Today most reported incidents concerning use of herbal products and medicines are attributable to poor product quality

or improper use. Assessment of these products is possible; however, the quality-control methods and specifications for herbal medicines, particularly mixtures, are very complex. Moreover, national and regional pharmacopoeias, which define quality specifications and standards for herbal materials and some herbal preparations, differ in naming conventions and recommended processing methods (WHO, 2004a,b).

States are therefore urged to improve their domestic systems for regulation, registration, quality assurance and control of medicinal plants (such as good manufacturing practices (GMP) and good agricultural and collection practices (GACP)) and devote more attention to consumer education and accredited provision of herbal medicine (WHO, 2004a,b). Such procedures may well be costly and hard to introduce; States must lay down priorities and draw up a strict road map, and share experiences.

The chapter on traditional medicine in the WHO report *The World Medicines Situation 2011* suggests addressing this issue by a more flexible but equally rigorous method already established in some legislation and guidelines. *History of use*, in conjunction with a consistent tradition of observation and field-testing, can provide evidence that a substance may be used safely and has therapeutic effects that are plausible. In any case, such verification remains absolutely essential, and the scientific community ought to be rigorous in reporting not only beneficial treatment but also harmful or placebo treatment; this also applies to modern medicine.

As for spiritual therapies, the main problem is one of methodology, or epistemology, since it is very hard to take a scientific approach to a cultural phenomenon with psychosomatic effects. However, these therapies reflect a given cultural reality and can be effective in that context. The problem is more the risk of misdiagnosis; if and when the intention is to cure an organic pathology with unsuitable treatment, the consequences can be serious for the patient. One answer might be to consider how the two types of medicine could complement each other and to train traditional practitioners in primary health care as well as promoting a permanent dialogue on practitioners' individual responsibility when practising and the boundaries of therapeutic knowledge. Such dialogue, which has already begun in some countries, would exploit the advantages of both systems, with traditional practitioners occasionally referring some patients to modern medicine, and modern medicine practitioners making use of resources offered by traditional practice to increase the efficacy of care provided.

#### **4.2.4 Non-discrimination**

Non-discrimination against traditional medicine entails recognizing it and respecting the rights of traditional practitioners. In many areas they are the first port of call for local people, either because of cultural tradition or because these communities have no access to modern health care. However, it is wrong to invoke protection of tradition and cultural identity, which is a de facto right, to prevent individuals from receiving exact and adequate information on the causes of their illnesses and obtaining effective treatment. It must again be stressed that people have a right to high-quality health care, regardless of the medicine they are dealing with.

In the case of traditional spiritual practices, the situation is more complicated, as they are based on a symbolic bond that is considered an essential part of the therapeutic relationship itself. However, the principle of non-discrimination does not entitle practitioners to prevent patients receiving vital treatment by claiming to have an effective or even miracle cure for acute or serious diseases or offering spiritual diagnoses based on local beliefs to persuade patients not to undergo recommended treatment. The medical responsibility demanded of practitioners of modern medicine also applies to traditional practitioners.

The best facilities for diagnosis, treatment and prevention should be available to every patient in every country, whatever the cultural context. It would be unacceptable to allow a two-tier health system to develop – one for the wealthy and another with easier and cheaper access for low-income social groups – since this would be to approve discrimination. Traditional medicine and

modern medicine can coexist if bridges are built between them. If a traditional therapy has proved effective, it should be universally available. But respect for cultural diversity and the fact that, in many cases, poor people do not seek what they do not know exists cannot serve as excuses for loosening or casting off the bonds of justice and solidarity in a world where life expectancy is more than 80 years for some and less than 50 years for others. Our public health systems are responsible for ensuring that the right to high-quality care is respected.

#### **4.2.5 Biopiracy**

Biopiracy, in Pat Mooney's definition, is "the use of intellectual property systems to legitimize the exclusive ownership and control of biological resources and knowledge, without recognition, compensation or protection for contributions from indigenous and rural communities".

Since 1981, banks of germplasm (germ cells or seeds representing the genetic pool of plants and other organisms) have been assembled in 26 institutions in 15 countries, regulated by the World Intellectual Property Organization. In Latin America, 80% of protected areas are inhabited by indigenous communities. Pressure from big business to "harmonize" patent systems allows companies and independent researchers to patent a molecule or plant directly with the United States Patent and Trademark Office or the European Patent Office; it is therefore the immediate responsibility of these bodies to verify that the original communities receive fair compensation.

The potential of traditional practices to improve some medical conditions creates new risks of exploitation, on top of practices and policies of discrimination. Advanced technology has allowed a swift and large-scale improvement in traditional knowledge of medicinal plants, but the indigenous peoples who own this knowledge have no access to such technology and, in most cases, no recognition or share in benefits and income is granted to the communities whose practitioners have been using these plants for centuries and which may subsequently be offered a patented product in return for payment.

Most indigenous cultures believe that the earth and its products are part of life and, as such, cannot belong to any one individual; some communities even believe that they are the custodians of this earth and all living things. The modern concept of a patent on organic products (plants and by-products) is therefore entirely unknown to them. Moreover, these communities may be marginalized by poverty and lack of access to dominant languages and may be ignorant of national legislation and options for international remedy. Lastly, they are often unorganized and have little voice in government. This being the case, a researcher can obtain access these products (unauthorized, with "bought" permission, or by coercion) and patent them, dispossessing local communities of their knowledge. This dispossession may be carried out by global businesses or national companies, although most developing countries are usually unable to exploit this traditional knowledge commercially. National legislation as it stands is not enough to protect traditional knowledge, and international trade law is an obstacle to such protection. We are thus seeing a failure to provide compensation to the indigenous communities concerned. Whatever the stage (whether research or marketing) this can be termed biopiracy.

The chinaberry tree is a perfect example of this risk: known for its fungicidal properties for at least 2,000 years in India, it was the subject of a patent application filed with the European Patent Office (EPO), and it was only after a five-year battle that the patent rights were revoked on the grounds of prior traditional knowledge in India, and the pharmaceutical company's argument that knowledge could not be considered "prior art" (therefore precluding grant of a patent) unless published in a scientific journal, was rejected. Unfortunately similar cases have been reported in which traditional medicine was not so successful.

In Asia, Africa, and Latin America pharmaceutical firms are currently funding research into plants and minerals used by indigenous communities in traditional medicine. Although research protocols are submitted to research ethics committees, there is no requirement to share patents or ensure that these communities benefit from pharmaceutical discoveries. This therefore constitutes



“biopiracy” and “plundering” of knowledge and traditional medicine. It raises the question of liability on the part of researchers and the managers of these pharmaceutical firms as well as the principle of justice for indigenous communities and developing countries.

Another major problem arising from businesses’ renewed interest in medicinal plants is the risk that the raw materials needed to manufacture drugs and other natural health products will be plundered. If the situation is not monitored and regulated, endangered species may well become extinct and natural habitats and resources be destroyed. Moreover, industrial production of these species would present other safety problems that would have to be studied.

## **5. GUIDELINES FOR ACTION**

Traditional medicine rests on analogical reasoning and a holistic approach to health and disease, while modern medicine is evidence-based and built on scientific knowledge. This does not mean that they are incompatible. On the contrary, these differences give rise to complementarities and even synergies, from which individuals can benefit. However, in many countries any productive action along these lines has been prevented by a lack of systematic knowledge about the benefits and dangers of traditional medicine, the need for sound policies ensuring the safety, efficacy and quality of products and treatment, and, more generally, a reluctance to grant official status to a branch of medicine that is still not fully understood. Nevertheless, the main areas where action is required are easy to identify.

### **5.1 Traditional medicine as a branch of medicine**

The Beijing Declaration, which was the key outcome of the first WHO Congress on Traditional Medicine held on that organization’s sixtieth anniversary and the thirtieth anniversary of the Declaration of Alma-Ata, for the first time offered international acknowledgement of the role of traditional medicine in health care. The Declaration clearly reaffirmed the need to regard these practices as something that “should be respected, preserved, promoted and communicated widely and appropriately based on the circumstances in each country” and the responsibility of individual governments to “ensure appropriate, safe and effective use of traditional medicine” through suitable policies, regulations and standards.

Ensuring the safety, efficacy and quality of traditional medicine is a priority inasmuch as it must be respected, preserved and promoted as a *branch of medicine*. Assessment of the outcomes of traditional medicine is therefore essential. Prior to any legislation, it is important to establish procedures for assessing these practices properly. Methodological discussion of research into and assessment of traditional medicine is usually divided into two fields: herbal medicines and traditional non-medical therapies. However, effective treatment is often the result of synergy between both types of therapy. Consequently, the efficacy of traditional medicine must be assessed as a whole, taking into consideration both types of treatment. The assessment of traditional medicine may thus be quite different from that of modern medicine. It is therefore extremely important that such assessment take place through continuing dialogue between traditional practitioners, researchers in the field of traditional medicine, scientific experts, and representatives of the cultures concerned. Responsibility must be shared and imposition of cultural frameworks and practices is to be avoided.

Although traditional practice is deeply rooted in specific cultures, a global strategy is called for. It would be advisable to establish a regularly updated global database together with international forums for sharing experience and agreeing on procedures. It must also be stressed that this type of medicine, with its age-old history, must not be barred from innovation-oriented work and research. Traditional medicine must be taken seriously as a branch of medicine; capacity-building is also a challenge in this respect.

## **5.2 Integration through regulation**

Proper regulation of traditional medicine is essential if it is to become part of the general health-system framework; this is both a national and an international objective. Numerous – but sometimes incoherent – policies and regulatory measures have been introduced at the national level.

A number of statutory measures relating to research might be used to create a framework for traditional medicine. Countries could introduce national policies with a view to drafting laws and regulations bringing in the statutory and legal provisions needed to regulate practice of traditional medicine. Health ministries and other national or local bodies could also implement programmes for specific purposes, such as supporting specialist research institutions. Fields in absolute need of regulation include the following: protection of individuals; patient confidentiality regarding the patient's state of health and information given to his or her therapist; informed consent for clinical trials and research; protection of patients against prejudice (e.g. HIV-positive people, people with other STDs, leprosy patients); respect for the dead; respect for ownership rights and intellectual property; adequate compensation (practitioners' remuneration, damages for malpractice); promotion of regeneration and conservation of national resources.

This work must be stepped up internationally, including through the development and promotion of global, or at least regional, networks of regulatory bodies. International Regulatory Cooperation on Herbal Medicines, a network established in 2006, is one example of a shared commitment to protecting and promoting public health in the most lucrative field of traditional medicine. It is essential that such initiatives for international cooperation be based on respect for local cultures and sensitivities while avoiding any pressure from specific interests or economic power. All stakeholders should be involved in setting the agenda in this field, and regulatory bodies and special committees should always include traditional-medicine specialists and practitioners on an equal footing.

The lack of precision in definitions and regulations is often a source of suspicion and distrust. Potential customers and patients surfing the Internet have easy access to treatments that are authorized and paid for by national health services in some countries but are illegal in others, as well as to herbal products that may be regarded as either medicines or dietary supplements, or even just foodstuffs.

## **5.3 Benchmarks for education and training**

Integrating different branches of medicine into a single health care system is a challenge for countries where what is known as modern medicine predominates. It is essential for doctors trained in modern medicine to learn about the cultures of indigenous peoples and respect their beliefs and customs by obtaining more detailed information and reaching a better understanding of traditional medicines and treatments. This is all the more important since users need to be protected against the possible risks and harm that might arise from simultaneous use of traditional and modern medicine. For their part, traditional practitioners should undergo appropriate training to be able to work with and effectively complement the national health system.

The idea of drafting and disseminating international benchmarks for traditional-medicine training that are developed through cooperation with practitioners seems very promising. It was such an idea that underpinned the four-year cooperation agreement between WHO and the regional government of Lombardy (Italy) which led to the publication in 2010 of benchmarks for some widespread traditional/complementary and alternative branches of medicine: Ayurveda, naturopathy, Thai massage, osteopathy, traditional Chinese medicine, Tuina massage and Unani medicine.

These benchmarks were intended to address what were seen as priority issues for developing fruitful relations between traditional and modern medicine: (a) supporting countries in establishing

qualification and accreditation systems for practitioners; (b) assisting practitioners themselves to upgrade their knowledge and skills through collaboration with other health care providers; (c) facilitating better communication; (d) supporting integration of traditional medicine into national health systems. Such tools should be improved for the purpose not only of better protecting patients and consumers and broadening the scope for them to make their own decisions but also of improving mutual understanding between cultures.

#### **5.4 Freedom of choice and scope for choice**

This point is probably the most important in terms of human rights. The Universal Declaration on Bioethics and Human Rights clearly provides that the right of every human being to enjoy the highest attainable standard of health cannot be subject to social, economic or cultural considerations or to religion or political belief (Article 14). This is entirely consistent with the obligation to respect cultural diversity and pluralism if, and only if, such respect will not materially infringe upon human dignity, human rights or fundamental freedoms (Article 12). Freedom of religion, for example, cannot be used to justify ritual abuse of women or sexual minorities that adversely affects their physical and psychological health; respect for pluralism cannot be invoked to support practices that discriminate against certain forms of illness. The contradiction should not be regarded as accidental: this specification shows that the principles laid down in the Declaration, however important in their own right, may sometimes come into conflict with each other. In such cases, a comparative judgment of these principles, and even the establishment of priorities, becomes inevitable.

Traditional medicine can play an important role in improving health. Nevertheless, the availability and affordability of this type of medicine in the least developed countries too often conceals an incapacity to deliver more effective treatment and drugs to individuals who are suffering and dying from diseases that could be, and are, treated successfully in other countries. Traditional medicine should contribute on its merits to developing the highest standards of health care. By improving basic services and facilities, education and the pursuit of excellence in local scientific communities, traditional practitioners, governments and international institutions can help to ensure that traditional practice is a genuine choice across the globe.

Trials conducted by non-governmental organizations to tackle HIV and AIDS in sub-Saharan countries by improving diagnosis and treatment and offering a level of care consistent with Western standards offer indisputable evidence not only of these people's complete ability to adapt to strict everyday rules and requirements but above all of their obvious readiness to make the transition from culturally familiar but ineffective treatment to more effective, albeit foreign, treatment. Ultimately, "competition" between the different options, based on sound information, proper availability and genuine affordability, is the best method of restricting or eradicating harmful practices.

#### **5.5 Protection from exploitation**

The Convention on Biological Diversity, which entered into force in 1993 and has been ratified by almost every State in the world, lays down important rules for protecting developing countries against the risk of exploitation of their traditional knowledge and natural resources. The obligation for researchers and multinational firms wanting access to these resources to obtain prior informed consent and to share the results and benefits of their use is clearly established.

Article 8, in particular, lays down the principle of "in-situ conservation" and calls on the Contracting Parties to "respect, preserve and maintain knowledge, innovations and practices of indigenous and local communities embodying traditional lifestyles relevant for the conservation and sustainable use of biological diversity and promote their wider application with the approval and involvement of the holders of such knowledge, innovations and practices and encourage the equitable sharing of the benefits arising from the utilization of such knowledge, innovations and practices". The Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising

from their Utilization was adopted in 2010 as a supplementary agreement to the Convention to provide a stronger basis for legal certainty and transparency regarding the need both to “create conditions to facilitate access to genetic resources” and to ensure “fair and equitable sharing of benefits” so as to increase sustainable use and strengthen the contribution of biodiversity to development and human well-being.

These instruments are important for two reasons. Firstly, they recognize that the principle of informed consent must also apply to the relationship between individuals/communities and the environment in which they live, in addition to the requirement for individuals to have autonomy with regard to what happens to their own bodies; traditional knowledge is a form of “property” that deserves the utmost respect. Secondly, they assert that, where health protection is concerned, intellectual property rights cannot take precedence. Governments are urged to make their own decisions and cooperate on the basis of the guidelines in the 2001 Doha Declaration on the TRIPS Agreement and Public Health, which recognizes that a certain “flexibility” is inevitable given “the gravity of the public health problems afflicting many developing and least-developed countries”.

## **5.6 A pluralistic concept of health**

Traditional medicine is not just a matter of diagnosis and treatment: it involves a more complex approach to life, death, health and illness and a different conception of the patient, doctor, patient/doctor relationship, individual/community relationship, health services and risk factors. Its holistic approach promotes patient involvement and is therefore more likely to be appreciated where an individual’s well-being is affected by a disorder of social, cultural or psychological origin or where the course of an illness calls for individual attention and not just “medical” care, as may be the case, for example, in some terminal diseases.

The role of traditional medicine should be understood in terms of complementarity. Through its own resources, modern medicine is in large measure able to reproduce the benefits obtained by traditional methods, as when the active ingredient of a plant is isolated, manipulated and reproduced in a laboratory and then sold in the shape of colourful tablets in a blister pack. Nevertheless, the cultural resources of an individual or community are an integral part of their well-being and something to which they may prefer to turn to improve their ability to cope with distress or illness.

Local communities which have been handing down traditional practice for generations and have a detailed knowledge of the logic on which it is based are best placed to contribute to informed, sustainable use of biological resources and to protect their own identity and well-being. On the other hand, governments and the international community should regard everyone’s access to the indisputable and unprecedented opportunities offered by modern medicine as a moral and political obligation. This should not automatically entail passing judgment on other cultures and their attitudes to life and death.

## **6. CONCLUSIONS**

Commitment to promoting health and access to safe, effective and high-quality health care for all human beings rests on the same idea of medicine as a gradually perfected system of diagnosis and therapy to combat disease, prolong life and improve individual well-being and quality of life. The fact that knowledge, skills and good practices based on theories, beliefs and experiences peculiar to other cultures can help to do this is not our primary concern. Empowerment of communities will enable individuals to choose the best treatment offered by both systems of medicine, and this choice should always be available. The right of every human being to enjoy the highest attainable standard of health has long been recognized as a fundamental right. Therefore, nothing but the best medical practice can set the standard. In line with the United Nations Declaration on the Rights of Indigenous Peoples, it must be acknowledged both that “indigenous peoples have the right to their traditional medicines and to maintain their health practices” and that “indigenous individuals have an equal right to the enjoyment of the highest attainable standard of

physical and mental health. States shall take the necessary steps with a view to achieving progressively the full realization of this right” (Article 24).

Traditional medicine can contribute – and has contributed – in various ways to the development and dissemination of good practice. With its centuries-old knowledge of herbal medicines, it has been used to treat or palliate numerous illnesses and has paved the way for discovery of new drugs. Its holistic approach stresses the universal aspect of a well-being that is also bound up with certain values – an aspect that modern medicine should on no account dismiss. However, respect for cultural differences cannot be invoked to justify preventing some communities from sharing in the benefits of scientific progress or failing in the responsibility to provide adequate information on the outcomes of different treatments. Governments are urged to adopt appropriate legislation for assessment, licensing and official approval of useful traditional drugs and practices and to cooperate in strengthening internationally approved rules. Governments and higher education are also urged to study, develop and adopt appropriate educational methods and tools for teaching traditional practices and to improve communication, capacity and solidarity. International agencies, NGOs and institutions for research into modern and traditional medicine also have a key role to play and should be encouraged to work more closely together.

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