

Traditional Health Systems and Public Policy

**Proceedings of an
International Workshop,
Ottawa, Canada,
2-4 March 1994**

**Edited by
Anwar Islam and
Rosina Wiltshire**



The International Development Research Centre
Le Centre de recherches pour le développement international
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FOREWORD

We wish to thank all of our collaborating partners, the First Nations, World Council of Indigenous Peoples, National Institute of Health and the National Museum of Health and Medicine for their invaluable role in making this International Workshop on Traditional Health Systems and Public Policy a success. The cooperation and support of IDRC President, Dr Keith Bezanson, Director General of Health Sciences Division, Dr Maureen Law, Director General, Corporate Affairs and Initiatives Division, Mr Pierre Beemans and Director of Special Initiatives Programme, Mr Chris Smart, contributed in no small way to the success of this initiative. A special thanks must also go to all the IDRC Divisional partners who assisted conceptually, administratively and financially in bringing the workshop to fruition.

This workshop generated wide interest, a high calibre of participants from all parts of the world and excellent presentations, honesty of exchange and important research and policy recommendations. All of these were evidence both of the growing importance of traditional health systems globally, and the work put in by our international and local collaborators.

There were important gaps and challenges which presented themselves to the planners from the design phase. Some of these were reinforced during the deliberations and emerged in recommendations. The most fundamental of the challenges was the divergence in philosophy, values and attitudes which underpinned premises about health and medicine and approaches to traditional and western health systems. These differences informed basic concepts, methodologies and policy prescriptions. This was evident even where the articulated goals of greater recognition of traditional health systems and collaboration seemed to be the same.

It was also clear that there is a major gap in traditional health research and policy in identification and analysis of implications of the impact of gender on practice, knowledge and its transmission, research priorities and policy. This workshop made a small step in informing the analysis and integration of gender and traditional health systems and this needs to be built upon.

We thank all the participants and participating institutions who came from international agencies including WHO and PAHO, health practitioners and researchers from North and South, traditional and western for sharing their expertise in a spirit of mutual respect and common search for solutions.

Traditional health systems are used by 80 percent of the world's population, most of them in the South, but with increasing numbers in the North. Changes in values, the recurrence of diseases, which until recently had been considered eliminated by modern medicine, the emergence of new plagues, for which modern medicine has not found an answer are all influencing this shift. This use of the traditional systems is most often combined with the use of western health systems. Research and policy are grappling with this reality and the need for greater sharing. This workshop, out of which emerged several regional workshops, represented an important milestone in the process of change and the search for healthy societies and balanced and sustainable health systems.

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WORKSHOP REPORT

PREAMBLE

This international Workshop on Traditional Health Systems (THS) and Public Policy was coordinated, within IDRC, by the Health Sciences Division and the Gender and Sustainable Development Unit of the Corporate Affairs and Initiatives Division. It was the outcome of a series of activities on issues and concerns related to indigenous knowledge, health and medicine, carried out by several international organizations and agencies. One of these activities was the Winnipeg Workshop on Indigenous Peoples and Health held in April, 1993. On behalf of the Pan American Health Organization (PAHO), it was organized by the Canadian Society for International Health (CSIH) in cooperation with numerous Native organizations. The Winnipeg Workshop emphasized the need for further exploring various issues related to traditional medicine prevalent among indigenous communities in the Americas. Following the Winnipeg Workshop, a two-day planning session was held at the PAHO office in Washington D.C. in August, 1993 aimed at exploring the issues of traditional health systems and developing strategy for future action. Along with others, this planning session was attended by representatives from IDRC, PAHO, and the National Institutes of Health, Office of Alternative Medicine. In that meeting, the idea was put forward of the need for a series of regional conferences on traditional health systems which would culminate with an international conference to bring forward resolutions and recommendations for action at the national and international levels.

Following further discussions, it was decided that IDRC would host an inaugural workshop in Ottawa to bring together all interested parties along with a representative sample of traditional health practitioners from around the world to identify research and policy issues, and problems and prospects of indigenous health systems. In pursuant of that decision, an inter-divisional organizing committee was formed at the IDRC in collaboration with other partners to plan for the Ottawa workshop. Four Divisions of the Centre - Health Sciences Division (HSD), Corporate Affairs and Initiatives Division (CAID), Information Sciences and Systems Division (ISSD), and the Environment and Natural Resources Division (ENR) - were represented in the committee. It also included representatives from the World Council of Indigenous Peoples (WCIP) and the Native Physician's Association of Canada (NPAC).

The workshop was organized by the HSD and CAID; and was held at the Centre in Ottawa from March 2 to 4, 1994 in collaboration with (a) the Office of Alternative Medicine, National Institutes of Health, b) Washington based National Museum of Health and Medicine, c) the Canadian Native Physician's Association, and d) the World Council of Indigenous Peoples.

Delegates from various Canadian and International Organizations, a number of indigenous delegates from Canada and Latin America attended the workshop. A total of 60 participants of varied background including traditional health practitioners, healers, medical doctors, researchers, policy makers, and administrators from various parts of the world were present.

GOALS AND OBJECTIVES

The goal of this workshop was to bring together organizations, agencies, and individuals from all over the world who were involved in practising, promoting and implementing programs, and conducting research on indigenous knowledge, health and medicines; and to discuss the various aspects of traditional health systems aimed at achieving the following objectives:

1. to promote a greater understanding and awareness about the complexity and diversity of traditional health systems in different cultures;
2. to explore the relationship between indigenous knowledge, gender and traditional health systems;
3. to examine the history, evolution and conceptual foundations of some of the major traditional health systems and identify and debate the tensions between various systems of health care;
4. to identify, discuss and debate both promising and problematic policy approaches with respect to the role of traditional health systems in the mainstream of national health care systems;
5. to identify and discuss priority research areas pertaining to traditional health systems; and
6. to provide a forum for traditional health practitioners, policy makers, researchers, and representatives of international agencies to identify and discuss public policy issues pertaining to traditional health systems, and develop strategies to address those issues.

Session 1

WORKSHOP OPENING

The inaugural session was chaired by Dr. Maureen Law, the Director General of the Health Sciences Division of IDRC. Drawing from her rich experience in international health as a member of various committees of the World Health Organization and the chairperson of the Board of Governors of the International Centre for Diarrhoeal Disease Research, Bangladesh, Dr. Maureen Law emphasized the need for this timely dialogue on traditional health systems. In the true spirit of the Workshop, it started with a Native prayer that included a ceremonial "healing circle".

The inner philosophy of the Native prayer was invigorating as it traced the history of the First Nation's quest for a resurgence of its healing systems. It recalled a Native prophecy that envisaged that their "way of life would change", and that Natives would enter into a period of ill health as they get disconnected from their traditional ways. The prophecy, nevertheless, is firm on the belief that the First Nations will again emerge from that period of ill health, and reconnect with their traditional knowledge and share that knowledge with people of all other races. This sharing of knowledge, we were emphatically told, is essential to bring peace and harmony in this planet and allow us to co-exist with all other forms of life and creations. Needless to say the prayer expressed the desire to see such sharing of wisdom at this workshop for the betterment of health for all.

Following the prayer ceremony, Dr. Keith Bezanson, the President of IDRC, welcomed all the delegates and expressed his "great pleasure to see IDRC, in particular the Health Sciences Division and the Corporate Affairs and Initiatives Division, playing such an important role in arranging this international workshop in collaborating with many of our Canadian and American organizations". The President remarked, "I am enthusiastic about the wealth of knowledge and the diversity of professional expertise and interest that are represented at this workshop. The diversity of resource people assembled here from all over the world makes me feel proud to be your host. I am confident that this richness of knowledge, wisdom and experience will make the workshop a success".

"Although since the beginning of the century, especially since 1950s our health care has increasingly been focused on interventions and heavily dependent of changing technology, people in developing countries and our own indigenous population remained loyal to what we call "traditional" health system. Quite often, health researchers and policy makers pay little attention to the multiplicity of "other" indigenous health services that are available in various parts of the world".

The President highlighted some of controversial issues pertaining to traditional health systems, such as, the role of traditional health systems in the national health care of the developing countries, particularly at the level of primary care. Should there be an integration between the "Western" and the traditional health systems? As attempts to pharmacologically isolate, and market, the active ingredient(s) present in herbs and plants accelerate, the issue of intellectual property rights must also be addressed. This issue becomes much more complex and compelling, Dr. Keith Bezanson argued, when viewed in the context of the centre-periphery relationship between the custodians of indigenous knowledge and the multinationals. The President also pointed out other, more fundamental, issues: how can we ascertain the efficacy of these traditional systems? What type of research needs to be done? Can one apply the "Western" methods in evaluating traditional medicine?

Dr. Bezanson underscored the complexity of these issues and strongly endorsed IDRC's leadership role in exploring this very controversial subject. He was emphatic in his belief that the assembled delegates "have the knowledge and expertise to debate these issues and provide some guidelines for future directions, both in research and policy".

The inaugural session was also addressed by the distinguished representatives of various organizations that were involved in planning the Workshop. They were: Dr. Judy Burtlett from the Native Physicians Association in Canada; Ms. Noeli Pocatera from the World Council of Indigenous Peoples; Dr. Daniel Eskinazi, the Deputy Director of the Office of Alternative Medicine at the National Institutes of Health; Honourable Claudine Schneider who served in the U.S. Congress from 1980 to 1990 and currently promoting traditional medicine; and Hon. James Bourque from the Centre for Traditional Knowledge at the Canadian National Museum of Nature.

Dr. Judy Burtlett remarked that the fundamental principle of the Native Physician Association is to respect aboriginal philosophies and promote traditional health care systems and as such "I am proud that the Association represents one of the collaborating co-sponsors of this workshop". She informed the audience that, as part of general activities, the Association organizes conferences and seminars on native health issues. In 1991, Dr. Burtlett noted, the Association had its annual conference on the alternative health care practices, where the problems and prospects of integration between modern and traditional health systems were discussed. She emphasized the fact that NPAC's participation at this workshop demonstrates its continuing interest in traditional health systems.

Addressing the delegates, Dr. Daniel Eskinazi noted that the Office of Alternative Medicine at the National Institutes of Health was created in 1992 by the U.S Congress precisely to investigate and validate what is called unconventional medical practices. "The term alternative medicine is very encompassing. Although spirituality is a major component in the traditional systems of medicine, it is difficult to put this aspect in scientific terms". He stressed that "more work is needed for evaluation and interpretation of traditional systems".

Calling the workshop "a timely initiative", Dr. Eskinazi pointed out that it is taking place at a time when the World Bank's report on health came under severe attack from international agencies and community groups for its omission of traditional systems of health. He lauded the fact that IDRC had accepted the responsibility of following up on policy development issues outlined in the 1993 World Bank Development Report. "This workshop is a positive response to that report", he noted. Dr. Eskinazi expressed his satisfaction in witnessing such a gathering where the systems of medicine are placed in a much broader cultural context.

On behalf of the National Museum of Health and Medicine, Hon. Claudine Schneider brought greetings to the Workshop. She noted that the National Museum of Health and Medicine had been active in promoting public education on health and the environment. The Museum had also been focusing on the cultural resources of the people who identify, harvest, and utilize the plants for healing purposes. She stressed that the preservation of cultural as well as biological diversity should go hand in hand. It is not difficult to identify the healing process, Claudine Schneider observed, if one understands spirituality and its power over our body and mind.

Hon. Claudine Schneider emphasized the need to identify research gaps in the traditional systems of medicine and to pursue international policy change towards the use of different modes of health systems. She stressed the fact that, to implement these policy changes, a strong advocacy group is needed where indigenous people must be included.

Speaking on behalf of the Centre for Traditional Knowledge, Hon. James Bourque, proudly cited his Native ancestry and the story of his grandmother who was a traditional health practitioner. "She was a scientist, a medicine woman, a well known midwife who healed hundreds of people," he continued. Hon. James Bourque pointed out three issues that need to be addressed: the recognition of traditional knowledge, intellectual property rights and the environment.

"First, I strongly believe that the academic community is the biggest stumbling block to the progress of recognizing traditional knowledge. They come to our community and gather information for their career development and then turn around and block recognition of our knowledge. The western education pushes aside the knowledge of indigenous people. This is an issue of great concern to the Native people. Second, we welcome people to our community, and provide them freely our knowledge, the knowledge that has been passed to us through generations. They gather our knowledge and leave. This is a kind of stealing of our knowledge from our people. I am pleased that Dr. Bezanson, President of IDRC, has brought up this issue today. Third, western teaching about the environment and health does not benefit us. It does not work in the way we do things and perceive the world around us. We have to look at the planet, to look at health systems from an indigenous point of view. This is the only way we will be self-sufficient and free from domination. I urge you all to respect that principle". He noted that this workshop is probably one of the most important events organized by IDRC and that its theme is very close to the guiding principles of the Centre for Traditional Knowledge. He expressed the hope that the Workshop will come up with some real public policy recommendations to recognize traditional knowledge and health systems.

Session 2

TRADITIONAL HEALTH SYSTEMS — ISSUES AND CONCERNS

Dr. Julian Inglis, the Executive Director of the Centre for Traditional Knowledge in Ottawa, presided over this second session of the Workshop which was addressed by Dr. Arthur Okothowiro, a researcher from the University of Kenya and Ms. Jeanette Bell from the University of the West Indies, Barbados. Dr. Okothowiro spoke on "Law and Traditional Medicine in Kenya", and Jeanette Bell on "Traditional Knowledge and Gender".

In his paper on "Law and Traditional Medicine in Kenya", Dr. Okothowiro traced the historical evolution of traditional medicine in Kenya and laws that from time to time tried to govern practitioners of such medicine. "In Kenya, the existence of traditional medicine was recognized in the legislation in 1910. But, it was not incorporated into the mainstream of policy and planning. Moreover, the ordinance made the provision of registration for practitioners as a precondition for practising traditional medicine." The 1910 legislation, Dr. Okothowiro pointed out, outlawed "witchcraft", although its practice never ceased.

The paper outlined important legal and policy changes that took place in Kenya since independence regarding traditional medicine. Traditional medicine was recognized as an important part of the health care system and was incorporated in the country's five year development plans. Yet, in order to practice traditional medicine it is necessary to be registered under the provisions of the Medical Practitioners or Dentists Act. This registration requirement made it difficult for the practitioners of traditional medicine to practice their trade. Moreover, some forms of traditional medical practice, such as witchcraft, have remained completely illegal. Socially, Dr. Okothowiro highlighted the role of women in traditional health care. He also pointed out that in Kenya traditional medicine is considered to be "inferior" compared to the western system. These legal barriers and ambiguities forced many traditional health practitioners to go "underground". Thus, in Kenya, the paper observed, "there is a problem of a good fit between traditional medicine and the legal system. For all practical purposes, it is the "customary law" that regulates traditional medicine in Kenya and not the formal legal system".

The paper postulated some of the tasks at hand for the government of Kenya, such as, developing a legal framework that can institutionalize and regulate traditional medicine. At the same time, according to Dr. Okothowiro, there is a critical need for better research in understanding the socio-cultural context of these traditional health practices. The paper concluded with a plea for greater understanding of traditional medicine and international efforts for resolving the critical issue of intellectual property rights and the preservation and promotion of indigenous knowledge.

From Kenya, Africa, the next paper took the audience to the Caribbean. Ms. Jeanette Bell from the University of the West Indies, Barbados talked about traditional medicine in the Caribbean islands in the context of the broader health care system. In the Caribbean, since the colonial regime, western trained and qualified medical doctors, nurses, technical personnel and other related professionals have taken over the control of the whole health care system. As a result, there was a general disregard and lack of understanding of other kinds of health systems. The traditional health practices in the Caribbean, Ms. Jeannette Bell remarked, were very much in tune with its ecology and holistic in nature responding to the physical as well as emotional and spiritual wellbeing of the people. For example, traditional healers continued the use of drums in their practice, which had been an important part of the Caribbean culture. The author described how the colonial regime discredited and suppressed much of the information on traditional health systems. The paper also outlined the continuing struggle in the Caribbean for the restoration and preservation of traditional health products and practices.

The author noted that historically traditional medicine in the Caribbean (called the "Old Bear" locally) was practised both by men and women. However, during the colonial era, men gradually stopped practising traditional medicine as its status suffered. As a result, more women entered into the system and emerged as the custodians of those traditions and knowledge.

A lively discussion followed the paper presentations. Most of the comments from the participants were on intellectual property rights issues and the preservation and promotion of traditional health products and practices. One participant, for example, questioned the prudence of banning traditional midwifery in the Caribbean instead of upgrading and integrating it into the mainstream of the health care system.

Concern was also raised about the continuing "disappearance" of traditional knowledge because of the lack of documentation. A number of participants identified the prevailing legal framework as one of the major obstacles to the development of traditional knowledge. Deforestation, destruction of biodiversity and the resultant scarcity of medicinal plants in the Caribbean were also noted.

Perhaps the most lively debate between the audience and the paper presenters at this session took place around the issue of intellectual property rights. Dr. Okothowiro was asked whether it is possible to define the issue at the local level by defining intellectual knowledge, the legal protection for such knowledge and intellectual property rights of the community in relation to the state as a whole.

Dr. Okothowiro's response to this question reflected the typical uncertainty felt by participants as a whole on this issue: "I do not know if such a possibility exists. As you know, the potential users of these resources, in the name of common heritage, are those who have the technology and money, particularly the west. They are the sole exploiters of resources. All plant materials that have been exploited have already been transported elsewhere, outside Africa. However, there is an important knowledge base among the members of many communities which can still be harnessed and used. The African Centre for Technology Studies is trying to develop a new

legal concept like "Farmer's Right", so that anybody utilizing knowledge about plant resources should have an obligation to compensate the members of the community for the use of that knowledge".

While thanking Dr. Okothowiro for his excellent work in Kenya, another participant wondered whether the Organization of African Unity, which has a medicinal plants group operating for quite some years, would be interested in some of the economic issues raised in the paper. One suggested that the GATT agreement should be more carefully reviewed in terms of its impact on patenting of African products and property rights. Another participant argued that it is wrong to posit the problem as one of finding a fit between the legal system and the traditional health practices, as Dr. Okothowiro seemed to have done. Community standards, often referred to as "customary law", always regulated the practice of traditional healers. Perhaps the legal system, as it is understood in the West, is incapable of either understanding or regulating traditional practices. It is rather difficult to legislate traditional practices that are simply beyond the scope of the Western legal system adopted since colonial times throughout the developing world, especially in African countries. According to this participant, what is needed is to develop a system where the laws fit, laws that are grounded in the socio-cultural context of the developing countries and take into full account the ideas, thoughts, knowledge and practices prevalent in these societies. .

The legal issue dominated much of the subsequent discussion. Dr. Okothowiro reminded the audience that in these African countries, there is a lack of political commitment to change the legal system in the way it should work for the people. At the same time, it is very difficult to justify a parallel system in which traditional sanctions can be used to determine who is qualified (and who is not) to practise such indigenous medicine. "I think, self-regulation or self-legislation, as one might call it, is a good approach. We are trying to insist that the practitioner will be a person who is recognized by his/her community as being qualified to practice. The problem is, how to implement it", Dr. Okothowiro stated.

A delegate from Latin America noted that the relationship between law and traditional medicine is being debated and reviewed in various countries in Latin America, primarily in Mexico, Peru and Chile. One group in Chiapas, Mexico has gone so far as asking the government to incorporate "indigenous law" in the constitution to recognize traditions and customs practised by the indigenous people.

Dr. Bruce Dakowski, Director of the Foundation for Ethnobiology (England) remarked: "When traditional systems are struggling for legislation or recognition, we, in the west, consider them as alternative. We should look at them as different, and to recognize the importance of difference. The traditional systems are defined by their coherence, rooted in a dignity and self-respect of indigenous peoples around the world, and are circumscribed by the implicit notion of the balance of reciprocity. I think that traditional systems and legislation are understood in terms of morality and spirituality. As a western doctor, I have seen the progressive secularization of medicine, and we have paid a tremendous penalty for that. This is reflected in my experience in the treatment of mental disease. So, the caution I would like to exercise to my colleagues is,

how can we regulate traditional systems without the regulation leading to secularization which ignores the spiritual dimension that may prevent disease. Ayurvedic medicine tells us that disease is "intelligence gone wrong". This particular phrase", Dr. Bruce Dakowski emphasized, "should be very carefully reflected upon by all".

One aboriginal delegate from the Caribbean very forcefully stated: "I had been in the Caribbean and lived with the village people there. I saw them take their children for treatment to the medical doctor and also to the priest known as "Pundit". More importantly, they always keep herbs in their kitchen. We do the same in our community. Unfortunately, during the last few years, these medicines have been under scrutiny. Our herb gatherers are having problem in picking good herbs as they are contaminated. Our concern is, how can we save those herbs. They have been our medicine from generation to generation. Indigenous knowledge is also on the verge of disappearance. Our elders and herbalists who have the knowledge are gradually disappearing. What is going to happen to our knowledge and tradition if we cannot preserve them?"

Dr. Okothowiro and Jeannette Bell offered some advise on the preservation of plants and indigenous knowledge. As a solution to preserve herbs one can harvest, protect and manage them by way of semi-cultivation, on a small-scale basis, in the community. This may be an effective way. In response to how to keep this knowledge alive, Dr. Okothowiro cited the example of the Conservation International: "They have set up an apprenticeship program in which scholarships are offered to young people to study various aspects of traditional health systems under the supervision of elders who possess the knowledge and craftsmanship. This program is very ancient and long-standing in Africa and has been very effective in validating professional status and in preserving traditional knowledge."

Session 3

HEALTH SYSTEMS — TRADITIONAL/WESTERN DICHOTOMY

Dr. Vincent Tookenay, President of the Native Physicians Association in Canada and a keen researcher in indigenous knowledge and traditional health systems among the aboriginal in Canada, chaired this session. In introducing the subject, Dr. Tookenay remarked: "From the panel of speakers, we expect a focus on explaining the traditional/western dichotomy. We have to look at and appreciate the diversity of peoples of the world and their background to examine how health care systems have evolved. Once we recognize this difference, we can begin to move forward and gain some knowledge and can recognize and respect each other and improve and develop our health status".

The first speaker at this session was Dr. Gerard Bodeker, the Chairperson of the Global Initiative for Traditional Systems in Health at the National Museum of Health and Medicine in Washington D.C. He was also a visiting fellow at Green College in Oxford conducting research on traditional health systems and public policy.

Dr. Gerry Bodeker noted that it is almost impossible to offer a precise definition of Traditional Health System (THS), since "there are almost as many different systems as different cultures and regional groups. Ethnic medical literature has defined them into two broad categories - the naturalistic systems and the personalistic systems. The naturalistic systems have been described as those which are natural sciences with controlled investigation of documented materiamedica having a comprehensive theoretical framework against which treatments are tested and new treatments are generated. The personalistic traditions have been described as those which have the knowledge of healing, possessed by an individual either selected by someone in the community or by a process of divine revelation, or revelation of some form."

Dr. Bodeker noted that a global interest in THS had grown in the past decade, although officially only in 1978 at the World Health Organization conference on primary health care, traditional system of health care was considered to be an important component of primary health care. Following WHO's initiatives, Dr. Bodeker observed, "research activities in this area increased and many countries have begun formalizing their own health systems and policies". Economic factors also played a role in this resurgence of interest in traditional medicine.

Dr. Bodeker also pointed out the cultural imperative in this regard. "It was a cultural imperative that lead to the passage of the Indian Medical Council Act which formally established the traditional systems - Ayurveda, Unani and Siddha - as official components of national health care in India. In Nicaragua, during the civil war there was very limited access to imported drugs in the country. Out of necessity, Nicaraguans turned to their local traditions to develop a traditional

health care. Vietnam had a similar experience. It has introduced the Heritage Program which is designed to capture and record traditional medicines before they are lost. Similarly, Vietnam's Modernization Program is aimed at promoting mass production of herbal medicine, providing training to medical assistants and doctors on traditional medicine, and developing an infrastructure for its continued evolution."

The concern for bio-diversity conservation, Dr. Bodeker noted, also contributed to this renewed interest in traditional health systems.

"Four broad organizational relationships have been identified between traditional and modern health care systems. First one is the monopolistic approach, where modern medical doctors have the sole right to practice. The second category is the tolerant approach in which traditional medical practitioners are officially recognized but are allowed to practice on condition that they do not claim to be registered medical doctors. The third category is the parallel system in which modern and traditional systems are officially recognized. Fourth one is the integration model where modern and traditional systems are merged together facilitating joint practice within a unique health system." In his paper, Dr. Bodeker outlined the strengths and drawbacks of all these models and remarked: "traditional health systems are holistic, cost-effective, undergoing renewal, have an important role in the primary health care, and valid within their own right."

Dr. Bodeker then described the "global initiative" for traditional health systems. "The global initiative is fundamentally a policy initiative which actually began in Washington D.C last year. Three regional workshops are planned for next year, followed by a global plenary session in Oxford, where resolutions will be taken to generate a new policy in all the areas we have been discussing. Hopefully, within a decade, we will see that traditional health systems is on the policy agenda in the international health planning like the environment has been in development planning".

In his paper Dr. Gordon Cragg from the National Cancer Institute in Washington, D.C., described the research program recently undertaken by the Institute "aimed at discovering drugs to prevent cancer". The objective is to conduct research on "new drugs based on plants, marine-organisms, micro-organisms, fungi, bacteria, and other resources from nature." In collecting plants, Dr. Cragg noted, "emphasis is given on those medicinal plants which are used by the local people. Plants having a diverse texture are also being collected, even if they are not medically used. Each plant is given a code when it arrives at the institute, and the information on each plant is fed into a central computer system.

"Once the crude extract is found active in the screening process, it is isolated for further processing to get pure chemical for clinical use. The final product is then used to produce drugs. Large collections of plants and organisms are needed as several procedures are performed. Because of the scarcity of these plants, alternative sources such as, potential for cultivation of source plants, plant tissue culture etc., are also looked into."

He informed the audience that the Institute is "studying the possibilities of cultivation of high yield plant types which normally grow in the rain forest region." Dr. Cragg also described some of the plants that have been identified to contain significant medicinal value in disease like AIDS, yellow fever, cancer, etc. More research, however, is needed.

On the issue of intellectual property rights, Dr. Cragg remarked that it is an important agenda for the Institute. "Scientists from source countries are invited to work in the institute for plant study, plant processing, and other related research activities. One of the important requirements on the intellectual property rights is that, when the drugs are ready to go on the market, the company having drug license from the Institute is obliged to negotiate with the source country agency or organization for royalties".

Dr. Francesca Grifo, one of Dr. Cragg's colleagues, further elaborated on a particular program of the Institute called "the International Cooperative Biodiversity Group", funded by three United States agencies - the National Institute of Health, the National Science Foundation and the United States Agency for International Development. There are three goals: conservation of biodiversity, drug discovery, and promotion of sustainable economic activity. "First, we are looking at the development of long-term strategies to ensure sustainable harvesting, increasing knowledge base, and training for structural development. The second goal is self-explanatory. Third, we have parallel efforts to focus on the way the extracts are going to pharmaceutical companies, and to initiate local cultivation of medicinal plants and development of local markets for them. In attempting to solve the intellectual property rights, we direct each group to negotiate their interest based on some principles and standards determined by the Institute. Those conditions must be met to get Institute's funding."

The next paper was on the Ugandan experience presented by Dr. Silvano Amooti-Kyomya, the Acting Executive Director of the National Council of Science and Technology in Kampala, Uganda. Noting that the use of plants and plant materials started soon after the appearance of mankind on earth, Dr. Kyomya observed that "in the past, the people relied heavily on traditional medicine for their health solutions in Uganda." With the introduction of Christianity, according to Dr. Kyomya, health practices in Uganda underwent a radical change. "Christian education and instructions undermined the traditional healers," and gradually people accepted modern health care systems. "Nevertheless", Dr. Amooti Kyomya contended, "people continued to believe that spirits are responsible for many diseases and misfortunes." Traditional medicines are still "in the hearts of the Ugandans, especially in rural areas. But the Christian Missionaries tried to discredit traditional medicines and advised their converts never to use them as they were labelled "primitive, risky, and devilish".

Following its independence, Dr. Kyomya pointed out, the government of Uganda recognized traditional medicine. "Traditional health systems and traditional medicines have been re-established in Uganda, not as a mere natural and lower level alternative to western medicine but with dignity in its own right. As a result, the National Chemotherapeutic Research Laboratory has been set up to harness the country's natural resources with therapeutic potentials. A special policy on traditional medicine has been recommended for inclusion in the national health policy".

Dr. Amooti Kyomya ended his paper with the hope that "with cooperation from professionals from both sides - the Western and the traditional - systems of medicine could be further improved and their utilization increased".

These papers generated much interest among the participants. One of them, Ms. Claudine Schneider, made a strong plea for wider acceptance of traditional modes of healing. However, she observed that such acceptance will not be forthcoming unless, through research, "one can establish specific examples of efficacy of the traditional healing system and demonstrate its cost-effectiveness".

Dr. Tookenay responded that "these are fundamental policy issues. Much scientific data on various traditional medicines and modalities are available. We need to bring them together into a single database. There are indigenous preparations of anti-malarial agent which are effective against malaria. We need to pull together what we already know to generate more research. Although very little has been done to demonstrate the cost-effectiveness of this system, it is possible to undertake such research".

Dr. Gordon Cragg emphasized another aspect, that of quality control. He observed: "Many effective traditional preparations are available in India, China and Mexico where controlled clinical studies are done on them. The critical point is the type of control and quality of the material used. The actual material used may itself be a problem. So, standardization and quality control seem to be very important in convincing the sceptics".

The discussion then focused on more fundamental issues, that of ascertaining quality of plants and herbs and the issue of validating traditional systems on the basis of Western scientific criteria. Dr. Tookenay, for example, noted that the quality of a plant cannot be properly evaluated when the sample is not collected from the nature, but rather "cultivated" in the laboratory. "So the question that Dr. Cragg has raised about quality control also relates to the method of cultivation and biodiversity and its conservation. There is a true dichotomy here". He continued, "your perspective is really western and perhaps it is the mass production of these products that you are referring to while looking at it from traditional perspective. There is a relationship between the environmental conditions of the growth of medicinal plants and the therapeutic value of these plants. It is important to recognize this fact".

One participant, Ms. Joanne Barnaby, from the North-West Territories expressed her frustration "to hear about validation of traditional knowledge with reference to western scientific techniques". Emphasizing that one must recognize and respect "the differences between the two systems", she pointed out that one of the most fundamental characteristics of the traditional health system is its belief in the "spiritual aspect of all medicinal plants and animals. Once this spirit is taken away, the wholeness of the medicine is lost".

Expressing her support to this point of view, Dr. Marlyn Cox, a physician of Native origin, pointed out that "integration of traditional and modern medicines seems impossible if we ignore the spiritual aspect of traditional medicine". Consequently, Dr. Cox noted, "the mass production

of traditional medicines makes little or no sense".

Dr. Anwar Islam, a Senior Program Officer at the Health Sciences Division of IDRC, commented that the term "traditional" is simply inadequate to capture the diversity and complexity of such systems. "In reality, it is neither traditional nor medicine. It is more holistic, and it treats a human as a combination of physical, spiritual and emotional attributes rather than simply as a combination of certain chemical compounds. One must look into these basic philosophical or epistemological issues before talking about mass production". Dr. Islam stressed that "a holistic system is fundamentally different", and that it is impossible to fully understand the traditional health systems without "respecting this difference. Perhaps, a different methodological paradigm is needed to understand a holistic health system".

This issue brought quite an emotional response from Ms. Irene Beaver, an Aboriginal Canadian from the North-West Territories. She remarked: "I am neither a doctor nor a university graduate, but I have been gifted in this field by the Creator. I am disturbed to find that some are advocating integration of the traditional and the Western health systems. And at the same time, I am pleased to see some First Nations people here, forcefully explaining our concerns. I want to know why all these doctors from all over the world have gathered here and talking about traditional healing. Are they trying to prove the superiority of one system over the other? Are we being treated as equals? If we are going to heal the world, we have to respect our differences. It is the Creator who has provided us with knowledge to heal people. We use trees which have power and spirit of healing. But some are more interested in patenting traditional knowledge, and they want to be the owner of that knowledge. We appeal to you to stop those who are continuously poisoning our water, putting toxic chemicals and industrial wastes in our plants, cutting our trees and rain forest and contaminating our planet in one way or the other. As a consequence, herb gatherers no longer can collect herbs which once were pure. This is what we have to think about, not the ownership. We have to work together to save those resources".

Dr. Gordon Cragg defended the Western practice of separating "spirit" from "treatment". Citing a herbal medicinal experiment being carried out in Uganda, Dr. Cragg observed: " drugs are being administered without any concern for or connection with the Spirit, just as Aspirin is administered for headache. The study, needless to say, did not find any spiritual thing or reaction after administering a herbal medicine".

Session 4

GENDER AND INDIGENOUS KNOWLEDGE ISSUES

Chaired by Dr. Rosina Wiltshire, the Gender and Development Specialist at IDRC, this session was focused on gender and indigenous knowledge issues as they relate to traditional health systems. Four scholars addressed the session - Dr. Marlyn Cox, a physician of indigenous origin from Manitoba; Dr. Raymond Obomsawin, Executive Director of the Oneida Nation Administration Offices in New York State and the founding Chairman of the National Commission of Inquiry on Indigenous Health; Dr. Chona Segismundo, Traditional Medicine Coordinator at the Community Medicine Development Foundation in the Philippines; and Mrs. Noeli Pocatera, Vice-President of the World Council of Indigenous Peoples.

Dr. Marlyn Cox, who had been slated for the previous panel, objected to mass production and commercialization of plants. She requested to be moved to this panel. Although the panel was designed to address gender issues, it was clear that a gap in gender analysis remained. Dr. Marlyn Cox described her own experience of incorporating Western and traditional medicines in her practice. It was a sense of frustration "by looking at the health conditions and status of aboriginal people" that led her to study medicine. "Ironically, when I was about to finish medical school, I felt something was missing from my life - what I was learning was not going to help aboriginal people. All on a sudden, I got a surprise invitation to attend a workshop on Traditional Indian Medicine held in Tucson, Arizona, USA, in 1989. There I met a community medicine man who taught me about traditional knowledge of healing. Being convinced of his teachings and deliberations at the workshop I went back to him at Crosslake in 1990."

It was this experience, she told the audience, that prompted her first to incorporate many aspects of traditional aboriginal medical practices in her work, and later, to work more closely with traditional healers. According to Dr. Marlyn Cox, "one of the teachings about traditional medicine is that, knowledge of these medicines cannot be bought, patented and documented; it is to be learned. Those who practice these medicines believe that the power of healing belongs to the Creator, people are only the vehicle. The medicine man performs healing, using plants and medicines, by the will of the Creator. The power of these medicines is the spirit in them given by the Creator, and nobody can put any standard to that medicine. So, the idea of documentation and mass production of this power and spirit of these medicines makes no sense".

She also reiterated that "since first nations people are self-governing and have the ability to regulate themselves, no different laws are necessary to regulate their health systems. I do not really see that written laws and standards are necessary for native peoples".

Dr. Raymond Obomsawin focused on the issue of indigenous health care and its position relating to western medicine. "Western medicine, by its highly specialized and techno-centric formation, has achieved an incredible capacity to monitor, control and manipulate the complex cycle of the human organism". However, one of the most salient problems of western medicine, Dr. Obomsawin noted, "is its aggressive disposition of local health and medical knowledge", and its inability to fully understand its limitations.

He, then, drew attention to the holistic nature of traditional medicine. "Traditional interpretation of illness is frequently associated with the origins of disease to the natural, social, and environmental context of the suffering rather than to specific bacterial or viral causation. Another aspect of traditional healing is perhaps its holistic property that leads to healing through treating the whole body rather than removal of specific symptoms. The majority of diseases are, in fact, attributed to simple natural causes. Although the role of supernatural and natural factors for cause and cure of disease may be dismissed as backward, simplistic and superstitions, modern medical science has recognized the simple lifestyle and environmental factors as primal preventives to disease".

Dr. Obomsawin emphasized the need for further research in this area. He noted that most researchers in the West agree that "there is a compelling basis for recognizing the international relevancy for research in the field of traditional medicine. A Pharmacobiologist at the University of Mesena, USA, after conducting a detailed historical review of plant medicine systems, concluded that the reexamination of nature in the quest for new therapeutic means can lead to remarkable results. Most researchers also maintain that endorsement of traditional medicine should not be conditioned upon the full assemblage and weighing of chemical, pharmacological, clinical and toxicological evidence. Such requirements would be untenable in the developing countries where western alternatives for traditional approaches are unavailable, unpayable or socially unacceptable".

Dr. Raymond Obomsawin strongly advocated the idea that "medical policies, procedures and practices need to be ecologically sound", and concluded his paper with a strong plea for continued support for indigenous health systems. He remarked: "medicine should become or be kept indigenous as it is derived within the cultural and material resources in each society".

The next paper was delivered by Dr. Chona Segismundo, a physician from Philippines actively involved in promoting traditional medical practices and products. Dr. Segismundo discussed the role of a small group of physicians to which she belonged who were working with community healers, many of them women. She emphasized that "healing is not just a technique but a discipline, a way of life, a religion, a commitment. Nobody can just be a healer, he or she is a chosen one who is merely a media of the omnipotent power. The healer's strength comes from meditation and prayer".

Describing the history of the Community Medicine Development Foundation (COMMED), Dr. Segismundo stressed that "COMMED has undertaken the challenge to promote traditional health systems in Philippines for those who are unable to afford modern medicine. COMMED believes

that a health care system should not only suit economic and socio-cultural conditions but also people's psyche or consciousness". For Dr. Segismundo, it is essential to recognize the interconnectedness of health and other aspects of the environment as the "Agenda 21" states, "health ultimately depends on the ability to manage successfully the interaction between physical, spiritual, biological and socio-economic environment". From this perspective, Dr. Chona maintained "there is a need to recognize and develop" indigenous health systems.

She noted that the Department of Health in Philippines is supportive of the integration of traditional medicine into the broader health delivery system. However, this raises several important issues. "For example, what exactly is the meaning of integration of traditional and modern medicine? Generally, when people want to understand traditional medicine they only take the knowledge and skills but not the underlying values, beliefs and spirituality. Intellectual property rights will be another major concern". She maintained that "if we are really serious in adapting indigenous system, it is necessary to get the essence of it. Without understanding its guiding principles and philosophies, Dr. Segismundo concluded, "we may do injustice to the indigenous systems and to the indigenous peoples".

These papers generated intense debate among the participants. Dr. Marlyn Cox commented that learning traditional healing is an art and that it takes great effort and time to learn such healing practices: "you do not become a big tree overnight, you have to sit back and grow slowly". Another Native participant, Joanne Barnaby commented that "one of the realities is that we are culturally oppressed and are denied of our own values. We must undertake research and document traditional knowledge not for others but primarily for the benefit our own people, to show more clearly the contributions traditional medicine makes to the society".

Another participant, Ms. Lea Bill, underlined the need to understand and recognize the nature of spirituality in order to fully comprehend traditional health systems. Dr. Judy Bartlett commented that "perhaps many of us have lost some of indigenous knowledge, but we can get back this knowledge through spiritual guidance and understanding. Indigenous people are being oppressed by others in various ways. These are issues we have to look at and discuss in a forum like this".

Dr. Daniel Eskinazi informed the audience that the Office of Alternative Medicine at the National Institutes of Health is currently funding about 40 projects including those dealing exclusively with spirituality, religion, and the effects of prayers using, primarily, biomedical methods.

Ms. Carole Yawney, a Medical Anthropologist from York University in Toronto remarked that one can not take the knowledge from the people and put them in a freezer or centralized it before it disappears for good. "The knowledge can not be put into 'bar codes'. They are embedded in each culture; it can not be taken out, extracted and codified". As for the issue of bridging the traditional and modern health care systems, she noted, "to make a bridge between the two we really need to walk on both sides".

Dr. Timothy Johns of the Centre for Nutrition and the Environment of Indigenous Peoples, McGill University, Quebec, observed that one must acknowledge the holistic nature of traditional medicine. The Workshop itself, according to Dr. Johns, in part at least, demonstrates a recognition of that approach. He appealed to the participants to "repair some of the damages done by colonialism" through innovative research. But at the same time, Dr. Timothy Johns concluded that it is unrealistic to expect that traditional medicine, in a comprehensive sense, "will ever be written down in books, or be kept in the repositories in some national medical centre, or can be codified by laws". For him, each community must decide its priorities and develop appropriate response.

Dr. Raymond Obomsawin echoed similar views. Referring to a recent study on indigenous knowledge systems, he noted that "one of the recommendations made in that report was that indigenous people, communities and organizations must be supported, so that they themselves can continue to retain their system". He lamented, however, that the report did not result in much action. Dr. Marlyn Cox, on the other, questioned the need for research itself: "I wonder why we need research on traditional medicine when our ancestors practised their way of healing for thousands of years without doing any research to find out what is more effective. The spirits helped them to find which plants are effective and which are not". She questioned the motive behind such research.

In supporting this view, Dr. Chona Segismundo observed that the real issue is to go back to the community and "communicate with them to find out the needs". Noting that there is still great confusion about the value and proper methodology for research in traditional medicine, Dr. Segismundo concluded that it is not research but "communication and dialogue with the people in the community that will resolve the issue".

Dr. Anwar Islam presented a brief on relevant research activities supported by IDRC in recent years. He also explained the criteria that are used by the Centre in assessing a particular research proposal, such as, its potential benefit to the community concerned, its sensitivity to gender issues, its potential contribution to equitable development, the sustainability of the research product or outcome and the scientific merit of the proposal. Referring to the objectives of this Workshop, Dr. Islam reminded the audience that the primary goal is to promote a greater understanding among all groups. "As we go from one culture to another we see a variety of systems which are non-conventional. The knowledge and the systems that prevail among indigenous peoples in the Americas may be a little different than what prevail in the Philippines, India, Bangladesh, Kenya, Middle East and so on". This Workshop, he concluded, "will help expand our horizons" and help understand "each other better".

Dr. Rosina Wiltshire summed up the spirit of this very productive session: "one of the key issues which emerged from speakers is that health is a way of living. It is central in any research and policy that we have to have respect for the indigenous knowledge and their health systems. Research has to be holistic in nature and needs to be done in collaboration with the community so that it does not move out of the hands of traditional people. We need to positively respond to these challenges if substantial results are expected from this Workshop".

Session 5

TRADITIONAL HEALTH SYSTEMS IN DIFFERENT CULTURES

Dr. Xiaothin Zhang, Coordinator of the Traditional Medicine Program at the World Health Organization, presided over this session. Papers were presented by Dr. P.K. Warriar from India, Dr. Hakim Azizul Islam from Bangladesh, Dr. Ahmed Elkadi from Egypt and Juan Reategui from Peru.

In his paper on Ayurveda, an ancient medical system developed in India, Dr. P.K. Warriar discussed its history, evolution and knowledge base. According to Dr. Warriar, the advent of western medicine, though it initially posed a challenge, helped Ayurveda - the "science of life" - to progress, absorb new knowledge and techniques and modify itself without sacrificing its fundamental tenets. "Although Ayurveda is grouped as a traditional system of medicine, it is not to be classified as tribal medicine. It is a system which has a scientific basis".

Ayurveda, Dr. Warriar observed, "is a science for promoting health and preventing and curing diseases. Diseases are due to imbalance of our internal organisms, due to lack of accord with environmental conditions. The whole world, animates and inanimate, are constituted by the five Bhutas (matter) - Akas (sky), Vayu (air), Agni (fire), Jala (water) and Prithivi (earth). We can not perceive the constituents of Bhutas separately. They work in harmony according to their predominance in the constitution of the substance. The study of Dravya is the most substantial and useful part of Ayurveda literatures. In Ayurveda, the function starts from the total effects, experiences from the properties and then to the structure. The utility of a substance, action or therapeutic step depends on how it acts in restoring the balance or maintaining the healing functions of an organism. We can judge the property of a plant, medicine or mineral by its material properties. So, it is the total property of the herbs or substance in the nature that is to be fully relied on. "Ayurveda is immensely rich with studies of dietetic articles and medicinal properties of herbs and others". In Ayurveda, Dr. Warriar noted, about 700 herbs are used. He maintained that being a country of diverse climatic and geographical peculiarities, India is a rich source of herbal and other medicines.

The second paper, presented by Dr. Azizul Islam from Bangladesh, outlined the nature and history of another ancient system of medicine - the Unani. "The foundation of Unani (the word Unan is the arabic name for Greece) system of medicine was laid by Hippocrates (460-377 B.C) who first established that disease is a natural process. Later he systematically studied the subject giving it the status of science. This system was enriched by the contemporary systems of traditional medicine in Egypt, Syria, Iraq, Persia, India, China and other Middle and Far Eastern countries.

"The Unani system of medicine, based on the humoral theory, assumes the presence of four humours in the body - blood, phlegm, yellow bile and black bile. Every person is supposed to have a unique humoral constitution that represents its healthy state. There is also the power of self-preservation in the human body. In the Unani system, great reliance is placed on this power. Physical examinations are also considered helpful in the diagnosis of various diseases. To maintain proper health it is necessary to ensure that various organs are in proper shape and that they are functioning properly. The famous Unani book "Al-Qanoon", written by the great scholar of Unani medicine, Avicenna, emphasised the importance of prevention of disease more than its cure. It is mentioned in the book that maintenance of proper ecological balance and keeping air, water and food free from pollution are essential prerequisites for the prevention of disease".

Dr. Islam noted that the Unani system flourished in the Indian sub-continent, including Bangladesh, following the struggle for its revival since the beginning of this century. Bangladesh, he pointed out, has a rich cultural heritage of traditional medicine, including Unani and Ayurvedic systems. "In spite of official support to modern medicine", Dr. Islam observed that the traditional systems are widely used in Bangladesh, even in urban areas. In rural Bangladesh, according to Dr. Azizul Islam, nearly 75 percent of the population still consider them as their primary source of health care.

Dr. Azizul Islam also described the gradual process of evolution of the traditional health systems in Bangladesh since its independence in 1971. "Soon after independence, the Government of Bangladesh recognized Unani and Ayurvedic systems of medicine. A new Unani and Ayurvedic practitioners ordinance was enacted. Training institutes leading to diplomas on Unani and Ayurvedic medicines have been established. It is expected that in the near future traditional medicines will be brought into the mainstream of the public health system in Bangladesh". He expressed the hope that physicians from all disciplines will work in a coordinated and cooperative manner for the total health care of the people.

Dr. Ahmed Elkadi, a cardiovascular surgeon involved in the treatment and research programs both in Panama City, Florida and in Dubai, United Arab Emirates, presented the next paper on alternative systems of medicine with special reference to the Middle East. The primary objective of this research/treatment program, Dr. Elkadi observed, "is to find alternative treatments for incurable chronic illness. This is a multi-modality, multi-therapy program composed of nutrition, minerals, herbs, vitamins, detoxification and counselling the patients about how to eliminate negative emotions, bio-feedback training, acupuncture etc.

Noting that traditional health systems in the Middle East are primarily of two kinds: herbal treatments and the Quranic treatments, Dr. Ahmed Elkadi, concentrated primarily on the Quranic treatments "since the subject is more mystic and least understood by most of us".

Dr. Elkadi described several studies carried out at the Institute of Islamic Medicine for Education and Research for better understanding of the healing effects of Quran as well as other alternative treatments and modalities. "Although our knowledge is very limited, we assumed that

three different aspects of the healing effects of Quran on the human body do exist. They are: effects on the body, on the mind and on the spirit. These effects may be direct (generated by the sound of the Quranic verses) or indirect (concept leading to the elimination of negative emotions). We did several controlled experiments on the direct impact of Quranic verses. Interestingly, there was a significant stress reduction or changes of various parameters among those participating in the Quranic session compared to those in the non-Quranic session. We, therefore, concluded that the sound of the Quranic word has some effect. We do not know how. The person who was reciting Quran might have some changes in his electromagnetic field or the aura which in turn influenced the person listening to those verses. In addition, there might be the legislative aspect of the Quran. For instance, there is plenty of scientific evidence that many of the things prohibited in the Quran are hazardous to health.

"The Quran's spiritual effect of healing is the indirect effect of the Quranic concepts that lead to the elimination of negative emotions. In both the clinics (in Panama City and in Dubai), we have been using this concept for teaching patients how to get rid of negative emotions, which have a very strong suppressive effect on the immune system. The main purpose of the treatment is to replace negative emotions with positive ones".

Dr. Elkadi further explored the issue of research and its role in traditional systems of medicine. "Some of us have expressed discomfort about scientific research. I think, we need it primarily for two purposes. First, to have a better understanding of what we are doing, how does it work, how can we better utilize the information and how it can be disseminated. Second, to communicate between those who have the knowledge and those who do not...It is an obligation for those who know traditional medicine and believe in it to let other doctors know about it. Importantly, we have to talk to the medical community in a language (i.e., the scientific language) they understand. Otherwise, millions of patients who are going to medical doctors will be deprived of the benefits of traditional medicine simply because their doctors do not know about it. We also need to revise scientific methodology to make it fit to produce good results". Dr. Ahmed Elkadi concluded his remarks by emphasizing the importance of learning from each other and expressing a hope that this Workshop will be a pleasant and learning experience for all.

Being requested by a participant for a more concrete example of Quranic treatment, Dr. Elkadi cited the example of treating depression. "It is a kind of emotion related to frustration and hopelessness resulting from bad or negative circumstances. The Quranic verses force one to look at the good things and make him regain the efficiency and positive emotions, and he becomes more cheerful".

One participant cited another example of such beneficial effect of sound therapy. "Dr. Hari Sharma, Professor of pathology, at the Ohio State University, studied the Ayurvedic system to know the effect of sound. He used English translations of Ayurvedic or primordial sound to study six different cancer cells under different conditions, playing primordial sound and heavy rock metal music on tape recorder eight to ten hours a day. He found that with the primordial sound there was a very substantial inhibition of growth of cancer cells".

Another participant echoed the views expressed by Dr. Elkadi and commented, "the issues of indigenous peoples and their health systems should not be taken lightly. I am encouraged to hear what Dr. Elkadi has said. If we all respect each other's philosophies, it will then be possible to be unified and live in harmony".

A lively discussion took place on the relative cost of traditional and modern medicines; and on the nature of plants. Quoting an article in the British Medical Journal, one participant observed that the average cost of treatment with traditional medicine is cheaper than that with modern medicines. For another participant, plants are living entities with effective ingredients with the power of healing. "Plants have intelligence too. Studies show that plants understand and react to gentle or rude words, and respond to music. I think, a true understanding of health is the perception of everything we experience in life - thoughts, emotions, attitudes, nutrition, food habits etc. Light has also a powerful influence on health. It influences the spectra of organisms in plants, mammals and in all life forms. In fact, all forces of creation have a powerful influence on our health. We can not escape from these influences without endangering our health".

Dr. Guilan Dong from the National Research Centre for Science and Technology for Development in Beijing, China also agreed with Dr. Ahmed Elkadi. In order to integrate modern and traditional medicine, one must be aware of the fact that both of these systems have their advantages and disadvantages, Dr. Dong observed. She also stressed that "we should find the scientific basis to make traditional medicine understandable to the modern scientific community. Since neither of the health systems can provide a complete treatment of many diseases, both should be developed".

Dr. Ahmed Elkadi summed up the lively discussion and observed, "it is true that certain modern techniques are good, such as surgery. However, these good techniques will work even better if the traditional systems are added. For example, some surgeries can not be performed without pre-surgery counselling".

Referring to the contentious issue of scientific validity of traditional medicine, Dr. Elkadi placed the burden with its practitioners. "This is not the fault of the traditional system per se, but the fault lies with the scientific methodology. It is a challenge for traditional medical practitioners to evaluate their own methods and present them in a language understandable and acceptable to others who do not believe it". Commenting on the issue of relative cost, he observed that certain natural therapies are expensive in the USA. But in term of complete treatment of chronic illness or disease, modern systems are definitely more expensive.

Session 6

RESEARCH AND POLICY

Dr. Sandra Land, the regional nursing advisor for the Pan American Health Organization in Washington D.C. and its key person for health and indigenous peoples', presided over this critical session on research and policy issues pertaining to traditional health systems. The session was addressed by Dr. Vanaja Ramprasad from India, Dr. Julian Inglis from the Centre for Traditional Knowledge in Ottawa, Dr. Victor Neufeld from the Centre for International Health at McMaster University, Dr. Xiaothin Zhang from the World Health Organization, and Dr. Gilles Bibeau from the Department of Anthropology, the University of Montreal.

Dr. Vanaja Ramprasad of India who has been involved with several small community groups in India for several years, working in the areas of bio-diversity conservation, food security and poverty, brought a new perspective to the Workshop. Although the spread of modern medicine has somewhat undermined other systems of health care, Dr. Ramprasad pointed out that "modern medicine reaches out to only about 15 percent of the population in most developing countries. The reason for this is probably that the modern medical system is culturally alienating to the people. There are fundamental differences between traditional and modern systems. For example, the traditional system basically conceptualizes mind, body and their interaction that produces the psychosomatic entity; while the modern system views the living organism as a machine constructed from separate parts". For her, this fundamental difference between the traditional and modern systems is critical. However, she noted that the basic problem faced by traditional medicine is "the scientificity, not the efficacy of the system".

Dr. Ramprasad observed that since independence, there have been efforts to revitalize traditional medicine in India. "In search of status and recognition, attempts have been made to integrate it into the mainstream of health care system". However, "integration raises problems because of the plurality of drugs and practitioners which policy makers find difficult to deal with".

Dr. Ramprasad also touched on some global policy issues pertaining to health. Referring to the Alma Ata declaration on primary health care, Dr. Vanaja Ramprasad observed: "Health for all by 2000 seems to be a dream. The 1993 World Bank report on Investment on Health does not come out as a truly international document, and the investment of the World Health Organization also may not be considered very credible. The report's theme on health sector financing, coping with adjustment and opportunities for reform, is very unsuitable and disturbing because the World Bank and its western experts have imposed harsh economic medicine, in the name of economic aid, which Indian people can not afford. It is also sad to note that this report is oblivious to the fact that India has some of the most advanced indigenous systems of health care that see life from a holistic perspective. It is only very recently that the West has begun to

appreciate shortcomings of the modern medical model". She stressed the fact that for some diseases like cancer, stroke, etc. a life-style change is a better and more cost-effective approach than the "glamour of using expensive high-tech medicines promoted by medical professionals and health industries".

Dr. Ramprasad drew attention to the international policy on health care reform and funding. She remarked that most developing countries are "victimized by the politics of funding" practised by such international agencies like the World Bank and the World Health Organization. "Where there is a lot of money for AIDS, no or very little money is available for Tuberculosis which kills over 400,000 people annually in India alone. How the government and the funding agencies and their Western allies are looking at the whole issue of traditional and modern health systems is a very complicated matter. I have no answer and have no blueprint to integrate the two systems, but I am throwing the issue to all of you to discuss in the right spirit".

In his speech, Dr. Julian Inglis, the Director of the Centre for Traditional Knowledge, informed the audience about the goals and objectives of the newly created Centre housed at the Canadian Museum of Nature in Ottawa.

The goal of the Centre, Dr. Inglis observed, is to pursue recognition and understanding of traditional knowledge around the world. "In order to achieve this goal the Centre has the following objectives: 1) to foster and support research on the nature and scope of traditional knowledge, 2) to promote and develop a code of ethics for such research, 3) to facilitate communication of ideas, experiences and practices for understanding and use of traditional knowledge through formal, non-formal and informal education systems and 4) to ensure that both traditional and modern systems are employed, in a complementary manner, in the planning and decision making".

Dr. Julian Inglis conceded that using the term "integrate" may lead to misunderstandings. According to the Centre's philosophy, Dr. Inglis pointed out, indigenous peoples have a distinct knowledge system that parallels that of the West. The Centre strongly believes that in efforts of integrating these two systems, one must ensure the full involvement of indigenous people's organizations, financial institutions, United Nations institutions and universities, etc.

Dr. Inglis described some of the interesting and diverse projects undertaken by the Centre for Traditional Knowledge. "In one project, a series of gatherings of elders, scientists and students is held in order to establish lines of communication. Under this project, a three year process has been initiated in collaboration with the Canadian Museum of Nature and a number of aboriginal organizations across the country. The second one is the arctic gallery project, which provides an opportunity to bring the knowledge of indigenous people in the circumpolar world into the museum of the twenty-first century. This approach will bring the traditional knowledge into the Canadian national museum system". He also elaborated on some other important projects currently being implemented by the Centre for Traditional Knowledge.

Dr. Vic Neufeld, Director of the Centre for International Health at McMaster University focused his address on recent developments in health research globally. He outlined the emergence of the Commission on Health Research for Development (COHRED), an international organization dedicated to the promotion of health research. One of the crucial questions that the Commission tried to address, Dr. Neufeld observed, was that of inequity in the distribution of resources for health research globally. While most health problems are in the South, most resources - both financial and human - to conduct health research are concentrated in the North. According to Dr. Neufeld, COHRED was formed in 1987 specifically to redress this mismatch. In 1990, COHRED launched the Essential National Health Research project to facilitate the process of setting priorities for national health research in each country. "The key idea was that every country, no matter how poor it is, should identify its own problems and priorities, assess its resource needs, examine the capacity to solve the problems and so on". Dr. Neufeld remarked that although this task looks very simple, only a few countries have so far established ENHR programs. He pointed out that the ENHR mechanism may be used to promote research in traditional health systems.

Dr. Neufeld appealed to the audience to take a different look at the World Bank Report on Investing in Health. "For the first time, the World Bank has addressed the health issue with a different outlook. To me, this was an important landmark. There was a fairly extensive collaboration prior to this report, and many of the people consulted were from the South. Most importantly, there was follow up of the report. For example, IDRC organized a conference in October last year, in collaboration with WB and WHO to discuss some of the recommendations. There has been serious concern to focus on participatory research involving communities". Dr. Neufeld cited an example of such participatory approach adopted by a centre in Mexico for its Centennial Community Surveillance project. "It is a process in which a community participates to identify problems that require investigation, and to design methodology, collect, analyze information and study results. A few months later, the same community may address another problem. This process is repeated in a retroactive way so that a community gradually develop expertise to conduct analysis, monitoring, evaluation and research".

Dr. Vic Neufeld also addressed the issue of prioritization in health research. For him, research priority needs to move from "curiosity driven" to the people-based activity. Referring to the issue of integration and coordination, he made two suggestions: first, to know more on how to use available research; and second, to look at the community level to identify desirable goals and outcomes of any health system in terms of its suitability, affordability, accessibility, choice and participation.

Dr. Neufeld stressed the need to identify the tools or methodologies that may help bridge the Western and traditional systems. Identifying, collecting and disseminating traditional knowledge, he pointed out is one of those tools. The idea of collecting and preparing an inventory of studies on traditional health systems, Dr. Neufeld argued, could also be an important step in that direction.

Dr. Xiaothin Zhang, in her address, outlined the World Health Organization's policy and activities on traditional health systems. She reiterated that the WHO is actively involved in encouraging the use of traditional medicine in each country to achieve "health for all". Dr. Zhang noted that the Alma Ata declaration also referred to the need for variety of health workers including traditional health practitioners and traditional birth attendants. Referring to the WHO Director General Dr. Nakajima's address at the 44th World Health Assembly in 1991, Dr. Zhang observed that "WHO is prepared to support its member states to formulate national policies on traditional health systems, study their potential usefulness and to educate and inform the community about proven traditional health products and practices".

Dr. Zhang further explained WHO activities in this area. "WHO collaborates with the member states in the review of national policies, legislations and decisions on the nature and extent of use of traditional medicine in their broader health system. Since integration of traditional medicine into national health system is an important issue, the safety and efficacy of drugs are also of serious concern. In this regard, WHO prepared a series of standards, guidelines and quality control methods on herbs, plants and medicines". She noted that these are distributed to member states through central and regional offices of WHO.

She informed the audience that WHO also promotes and supports efforts by member states in enhancing the training of traditional health practitioners, traditional birth attendants, medical doctors and other health professionals and workers. Emphasizing that traditional medicine plays a vital role in meeting the primary health care needs in most developing countries, Dr. Zhang noted that the primary goal of WHO's Traditional Medicine Program is to strengthen the cooperation among member states, international organizations and other agencies with a view to facilitate the integration of traditional medicine into the mainstream of the national health care system in developing countries.

Dr. Gilles Bibeau focused on the issue of integration of national and traditional health systems with particular reference to his experience in Zaire, Africa. In most developing countries, according to Dr. Bibeau, there are three distinct categories of healers - the herbalists, the ritualists and the spiritualists. Since they differ from each other in terms of their knowledge base, mode of practice, etc. the issue of integrating the national and the traditional health systems becomes much more complex. "Another important problem is that the system of knowledge is contaminated. It is not only a series of signs and symptoms people use to identify a disease, but something else. This knowledge about the symptom and its nature is contaminated by the "meaning" (ie, the explanation of what caused the disease). References are made to spirit or magic to explain the cause. The key issue in traditional health system is the notion of spirituality and religion which contradicts the modern concept". Another complicating factor, according to Dr. Bibeau, is the fact that "a single plant is not therapeutic. It is a recipe or a mixture of many herbal plants that is therapeutic".

In order to integrate the two systems, Dr. Bibeau observed, the health policy must recognize, one the one hand, the relative role of the traditional and modern health practitioners; and, on the other, be sensitive to the "constraints of integration". National health policy, he pointed out,

must be based on a recognition of cultural plurality and health needs of the people. "Governments should work very closely with the healers associations aimed at establishing a community-based, culturally sensitive, manageable and economically viable health system in the country. We have many progressive models for implementing community-based health services but most of them did not work in many developing countries. The reason being that the planners and professionals tried to run the program without much consultation with and input from the community at large".

This session also generated intense debate and discussion, primarily on the issue of ownership of knowledge and the World Bank report "Investing in Health". Citing a project on creating a database in traditional knowledge carried out in Athabasca, northern Alberta, Ms. Lea Bill from the Aboriginal Nurses Association of Canada observed that it was very difficult to convince the researchers that the knowledge "belongs to the community, not to any individual". The researchers, she pointed out, were more interested in extracting and codifying the knowledge without any "reference to the community".

Another participant took the argument a step further and remarked that according to the tradition of aboriginal people, all knowledge belongs to the Creator. "It is only the Creator who has the ownership of all knowledge. The core of all healing, of all human development is spiritual and in the heart of the culture. This core cannot be easily described in models. It is fluid and illusive. It is love and sacrifice, tribal protocol and unity. Spirit is the spin and the scull of our development. Unless this core is nurtured there can be no human development". Noting that "for every disease there is a solution", he stressed "if we use our hearts, minds and spirits together we will find solutions".

In response, Dr. Bibeau noted that among the Canadian aboriginals, the community itself is the owner of the knowledge on herbs, plants and medicines. This communal ownership of knowledge, he pointed out, is not accepted by the Canadian law which operates on the principles of individual rights and individual ownership. So far as traditional medicine among the Canadian aborigines is concerned, "at present, we have to work within the dominant legal system".

Referring to some of the arguments made by Dr. Vanaja Ramprasad in her paper, Dr. Gerry Bodeker observed that factors responsible for devaluation of cultural tradition in many developing countries are multifarious and complex. "It is not only the fact that the informal (traditional) system is not state-sponsored but also due to the factors like urbanization, change in life-style, pervasive influence of the education system of the dominant scientific model etc. that lead to the devaluation of cultural tradition". Referring to the World Bank report which completely neglected traditional health systems, Dr. Bodeker remarked: "the Bank has come under severe attack from within and other organizations. In the case of the Bank's terms and conditions on how to operate recipient's health system, I remind you of Mahatma Gandhi, who was once asked, how a few thousand englishmen were able to conquer hundreds of thousands of Indians. His view was: "we let them". The same principle applies here. When China was negotiating for the first loan with the World Bank, the country demanded that part of the loan must be granted for the development of its traditional health system. The Bank initially rejected

the idea, saying that there is no data to support the efficacy and safety of this system, and according to the Geneva convention it is not an appropriate health system. In response, China said, thank you very much, we do not want your loan. Later, the Bank realized that China was politically important to it, and eventually granted the loan. We always assume that we have no power in our relationship with large organizations. It is a mistake. I would urge you not to assume that you are a passive recipient of World Bank instructions. Through your own political process you can effect change as well".

Dr. Sandra Land described the efforts made by the Pan American Health Organization in promoting traditional medicine and indigenous health since the Winnipeg conference in early 1993. PAHO is "promoting collaborative research at the regional level and in selected countries on high priority issues" related to health care for the indigenous people. She noted that PAHO is urging governments to initiate appropriate health system reform and "support the development of alternative models including traditional medicine".

Mr. Juan Reategui, an indigenous researcher from Peru, cautioned that research should be used as a tool to strengthen the traditional culture, and "not threaten it". He emphasized that research should increase "our understanding of traditional knowledge" and "confidence in healers and elders". For Juan Reategui, if carried out properly at the community level with meaningful involvement from indigenous people, "research will bring pride in the younger generation" by promoting an understanding that "their culture and tradition" have something valuable to offer to the people of all cultures.

Session 7

FUTURE DIRECTIONS

Presided over by Dr. Micheal Montour, a physician actively involved in the Native Physicians Association in Canada, this concluding session was addressed by Dr. Constance McCorkle, a sociologist and agricultural anthropologist; and by Dr. Vincent Tookenay, the President of the Native Physicians' Association in Canada.

Dr. Constance McCorkle described the "Ethno-Veterinary Development and Research project which is "related to traditional systems both of human and animal health", and outlined "the lessons learned". According to her, the first lesson is that traditional medicine "is effective, inexpensive and readily accessible" to local people. "Second, the techno-blending knowledge often provides cost-effective and readily accessible solutions to local problems, perhaps the best for both worlds. Third, the act of validating the efficacy of traditional materia-medica from local flora and fauna can protect the critical bio-diversity. Act of validation can also stimulate the creation of local trade and industry of the products based on local resources. Fourth, ethno-science provides more environmentally safe solutions than those provided by western scientists and developers. Also, local solutions are often safer than their western counterparts. Fifth, the potential for environmental friendliness and sustainability relies on the management practices and social organizations to implement them".

Dr. McCorkle stressed the fact that traditional knowledge needs to be effectively applied in resolving various health problems. Local knowledge should not be dismissed "as non-conventional or super-natural idioms". She pointed out that while the Western world tends to draw a boundary between human medicine and animal medicine, a majority of ethno-medical systems, mostly in Africa, do not make such distinction. Consequently, it is not uncommon to find traditional health practitioners "who treat both humans and animals". However, she emphasized the need to fully recognize that "not all traditional medicines are beneficial, no more so than western medicines. I would say that it is both scientifically indefensible and socio-economically reprehensible to ignore the rich tradition of local knowledge and their human bearers and practitioners".

In his presentation, Dr. Vincent Tookenay almost summed up the spirit of the debate when he remarked, "we have to recognize that as we all live on the same planet we all have to work together to improve the health state of the whole planet". According to Dr. Tookenay, the indigenous people can make a major contribution in this regard. Noting that "there always was, and will be a dichotomy between western and traditional health systems", he strongly urged for greater understanding between peoples of different cultures. He noted that aboriginal people in Canada are "themselves multi-cultural and multi-linguistic". "This multiculturalism of the

aboriginal people can help bridge the gap between the western world and the traditional world", Dr. Tookenay concluded.

Discussion was again centred on the issue of the dichotomy between the "modern" and the "traditional" systems of health. One participant observed that "the western world has a right to evaluate and adopt or change the traditional medical practices, if it is for the benefit of the aboriginal people. Similarly, the aboriginal people should be allowed to evaluate western medicine based on Indian culture". Another commented: "Western medicine deals with only the physical cure, whereas the traditional health system provides both cure and prevention of illness. It deals with the treatment of spirit, mind and body". Needless to say, the participant felt that the traditional health system is holistic and "provides a complete answer to human health needs". Dr. Tookenay responded with a more pragmatic fashion: "We have to deal with the realities of the world today. We must be tolerant with each other, and try to gain from each other, and at the same time to preserve traditional culture. It is totally inappropriate to control or impede the development of other cultures". He expressed the strong conviction that the aboriginal people in Canada is fully "capable of deciding their own fate and future".

SUMMARY AND CONCLUSIONS

On behalf of the Organizing Committee, Dr. Anwar Islam, summed up the fundamental questions raised at the Workshop. They are:

- (i) How can we better understand the diverse systems of traditional medical care?
- (ii) What role traditional health care systems can play in the overall health systems of the countries concerned?
- (iii) Is it feasible or advisable to use western scientific research methodologies to validate or evaluate traditional health systems? and
- (iv) What are the national and international issues underlying research and resurgent interest in traditional health systems?

A broad consensus emerged at the Workshop on these issues. The first consensus is that traditional medicines are diverse, complex, and grounded in cultures. Second, even though these systems are diverse there is an underlying common theme - the "spirituality". Third, if science is defined as "systematic knowledge", traditional medicine is a science in its own right. Fourth, the active ingredient approach cannot be applied to traditional health systems as it ignores the spiritual aspect of traditional medicine. Finally, international agencies need to empower the indigenous people to handle their own problems viz, to do research, to control, regulate and evaluate their medicines, health systems and practitioners, and so on. IDRC and other agencies can only play the role of facilitators.

Dr. Rosina Wiltshire summarized consensus reached at the Workshop on policy issues. These are:

- (a) research on traditional health systems must be owned and run by the community, and its products and benefits must belong to the community;
- (b) already existing studies and the information on traditional health systems need to be utilized;
- (c) the impact of macro-economic policies and economic erosion on both the modern and traditional health systems should be looked into;

- (d) the healing associations, community leaders, elders and the local practitioners are important sources of learning, sharing and communicating traditional knowledge and indigenous health practices; and
- (e) there is a need to look at the communities which have maintained healthy ways of living, so that we can learn from and draw upon their methods and practices.

The Workshop made a number of recommendations. These include:

- (1) Self-determination is essential. So, communities and traditional healers must be involved in the health planning process;
- (2) formal health care personnel should be trained in traditional health systems so that they have an exposure to and respect for these systems;
- (3) the concepts of equity and sustainable development need to should guide health care planning;
- (4) in dealing with traditional health systems, the concepts of ethics and spirituality need to be recognized and incorporated in the policy and planning of health services;
- (5) this Workshop should serve as a learning experience and a springboard for other Workshops of this kind at regional and country levels; and
- (6) IDRC, WHO and other agencies/organizations should provide greater support to research, particularly by indigenous scholars, on traditional health systems.

TRADITIONAL HEALTH SYSTEMS: ISSUES AND CONCERNS

Law and Traditional Medicine in Kenya

Arthur Okoth-Owiro

1. INTRODUCTION

Aims and Objectives

During the last two years we have been studying the relationship between law and traditional medicine in Kenya. This study was funded by the International Development Research Centre (IDRC). The objectives of this study were:

- a) to record the historical evolution of the relationship between traditional medicine and the law in Kenya;
- b) to identify the aspects of traditional medicine that are amenable to legal control and regulation;
- c) to investigate and report on the operations of the legal tools currently used to control and regulate traditional medicine and the practice thereof; and
- d) to propose draft legislation for an appropriate legal framework for controlling and regulating traditional medicine in Kenya.

Perspectives of Theory

i) The Concept of Traditional Medicine (TM)

Traditional medicine (TM) is "the totality of all knowledge and practices, whether explicable or not, used in diagnosing, preventing or eliminating a physical, mental or social disequilibrium which rely exclusively on past experience and observation handed down from generation to generation" (WHO, 1976). Other labels for TM include "ethno-medicine", "folk-medicine" and "native-medicine" (Good and Kimani, 1980:303). However, whatever term is used, it must be recognized that TM reflects the socio-religious structures of indigenous societies from which it developed, together with the values, behaviour and practices - internal and foreign - incorporated over the centuries" (Good and Kimani, 1980:303).

TM was the only system of health delivery in Africa before contact with foreign health systems through colonialism. When the colonial state was established, western medicine was introduced in Africa - both as a system of health delivery and as part of the "ideological baggage" of colonialism. What today is described as conventional medicine, modern medicine, or western medicine

replaced TM as the officially recognised system of health delivery.

ii) Law and Its Functions

The term "law" refers both to any individual rule imposed by the state for mandatory observance by its subjects, and to the totality of the legal system (Hart, 1961:90). One of the major functions of law is policy implementation. In the context of colonial and post-colonial Africa, the two specific policies were purposive social change (Ghai and McAuslan, 1970), and articulation of modes of production (Fitzpatrick, 1980). The particular form of social change for which law was required or expected to induce in Africa, was seen as modernization of traditional african societies. Whether conceived of as law and modernization, law and development or just law and social change, it appears that there has been a policy assumption that legal innovation, the introduction of a certain number and type of legal rules and regimes, can produce qualitative and quantitative social change in Africa. At the same time, capitalism's penetration in Africa has not been economically strong enough to transfer and shape indigenous structures in its own image and likeness (Kay, 1975). "Although these structures have been modified and subordinated in varying ways to the demands of capitalist production, capitalism has also served to conserve them. In the literature of mainstream development sociology, a determinant theme is the co-existence of capitalist penetration and traditional structures involving the persistence of the latter. Thus, there is the endurance of account and theories of pluralism" (Fitzpatrick, 1980).

iii) Law and Traditional Medicine

The relationship between law and traditional medicine in colonial and post-colonial society is best conceptualized as an aspect of the relationship between the state and traditional institutions. When the colonial state was first established there was an inevitable confrontation, and a long struggle for accommodation between it and the traditional society. The content of that relationship depended on the extent to which the traditional institutions were compatible with the interests of the colonial state. The law is the chief instrument which the state used to impose its intentions on the subjects of colonial rule. The patterns of relationships which began during colonialism have persisted in the post-colonial era, even if subtle and gradual changes have been observed.

Three possible legal responses to the challenges posed by the confrontation with traditional institutions may be identified. First, law was used to protect and promote traditional institutions whenever these institutions performed functions which served the interests of the colonial state. Second, traditional institutions were discouraged, proscribed or exterminated whenever they ran counter to the interests of the colonial state. Thirdly,

traditional institutions were simply ignored if they were irrelevant to the interests of the colonial state.

The interest of the colonial state was modernization, while that of the post-colonial state is development. Both are forms of westernization of traditional societies. At the same time, both forms of state recognised the limitations of resources in the great mission of social change. In the colonial state, this required that traditional institutions be preserved pending penetration of the state and capitalist institutions. In the post-colonial state, the theme varied to incorporate politically more neutral phraseology like harnessing indigenous resources for development.

2. TRADITIONAL MEDICINE AND HEALTH POLICY

Evolution of Health Policy in Colonial Kenya

Kenya became a colony of Britain towards the end of the nineteenth century (Ghai and McAuslan, 1970: ch.1), and became the recipient of western culture. Western conceptions and practice of medicine were part of that culture. This system of medicine was superimposed on the traditional system. The interaction between western and TM can be analyzed as a process of the unfolding of health policy in colonial Kenya.

The Pre-World War 1 Situation: Early Foundation of Health Policy

In terms of stated goals and an articulation of the means for achieving them, there was no health policy in Kenya before the first world war. But the early period of colonialism did sow the seeds of a colonial health policy. The two important influences on health policy were the endeavour to transplant British administrative institutions in Kenya, and form a medical care for the European population. Before the first world war, there were only three objectives of medical administration (Beck, 1974:103).

- 1) Preservation of health of the European Community;
- 2) keeping the African and Asiatic labour force in reasonable healthy conditions; and
- 3) preventing the spread of tropical epidemics especially plague and malaria.

Regarding policy foundations, three developments were important: i) a department of medical services was established in 1908 (Milne, 1928), ii) the church missions started establishing departments of medical services as a part of their vocation, even though the extent of their penetration was difficult to ascertain, and iii) the medical practitioners and dentists ordinance was promulgated in 1910. The ordinance made provision for registration of practitioners as a precondition of practice. But some TM practitioners were exempted from registration. The ordinance read as: "Nothing contained in this ordinance shall be construed to

prohibit or prevent the practices of systems of therapeutics according to native, Indian or other asiatic method by persons recognized by the community to which they belong to be duly trained in such practice".

The Inter-war Years: Emergence of a Health Policy

There were two important developments in the post-World War I period. First, the acceptance by the colonial authorities that the African population was entitled to preventive and curative medical services (Beck, 1974:103). The medical department understood that it was responsible for maintaining the health of the entire population (Gilks, 1922). Second, the introduction of the dispensary system in the rural areas, which was a useful supplement to the pioneering missionary efforts. The effective implementation of these new policy innovations was, however, hampered by lack of adequate funds and trained personnel.

Although the colonial administration accepted its responsibility of providing health to the entire population, the arrangements for financing the enterprise were rather unclear. The result was that the state continued to rely heavily on the efforts of church authorities to assume responsibility in matters relating to health. It is obvious that by "medicine" and "health," the colonial authorities were referring to the western variety.

Developments after World War II

The developments after the second World War formed the foundations of health policy and medical administration inherited by the independent government of Kenya. As a policy goal, the intention was to develop "modern medical services", an elliptical reference to the intention to replicate the English system.

After the second World War, medical progress along the lines laid down before the war continued (Adalja, 1962; Beck, 1970; Carman, 1976). In particular, priority was given to the extension of the system of dispensaries that had already been introduced before World War II. Two new developments were important. First, medical research was introduced (Mungai, 1974). Second, the training of medical personnel was institutionalised.

THE ROLE OF TRADITIONAL MEDICINE

The dual system of health delivery which resulted from the imposition of western medicine on traditional communities was a de facto situation which was not recognised in policy. Health planning was restricted to western medicine. It has been pointed out that the existence of traditional medicine was first recognised in legislation in 1910. However, it was not incorporated into the mainstream of policy and planning. As a result, the practice of TM

became marginalised. No controls - with the exception of surviving cultural sanctions and regulatory processes - were developed or adopted to control the practice of traditional medicine. And no organised body of information was collected and stored on TM.

Two developments on the role of TM should be recorded. First, although TM was discouraged and marginalised, western medicine remained inadequate and inaccessible to the majority of the population. With the gradual breakdown of the traditional society (as a result of the penetration of the state and capitalism), a gap was created which neither the inadequate western medicine nor the marginalised TM could fill. In the words of Banerji, "this vacuum was filled by faith healers, sorcerers, magicians, and other quack medical practitioners, who exploited the suffering of the people for their own gains" (Banerji, 1984:261).

Second, the assumption of the colonizing power was that TM was going to disappear as the colonized society become "modernized". Moreover, religious propaganda and Western missionary education spared no effort in stigmatising the practice and institution of TM in Kenya. The official morality of the colonial power did not approve of traditional medicine.

Inspite of this onslaught, TM survived and remained the most important health care system in Kenya (Good and Kimani, 1980; Katz and Katz 1981). Regarding the relationship between TM and law, two inferences are revealing. First, a specific legal arrangement was chosen to deal with TM which simultaneously recognized and tried to stifle it. The survival of TM was therefore both a function of its resilience and the role of law in the dynamics of the colonial society. Second, specific steps were taken to ensure that, from policy perspective, traditional medicine become moribund and marginalised. Law was used in this respect, through the instrument of "legal abstention".

HEALTH POLICY IN INDEPENDENT KENYA

Background

An important consideration that shaped the direction and content of health policy in the post-colonial period, was the rhetoric of liberation struggle. Kenya became independent in 1963 after decades of agitation, struggle, war and negotiation. The new nationalistic leaders of the liberation struggle promised many benefits of independence. In terms of financing of health care, there was a radical departure from colonial policy. The new government was committed to a gradual introduction of free medical care. According to the Sessional Paper number 10 of 1965, "the declared aim of the government is to provide medical and hospital services...These are the objectives of African socialism, but to provide them fully and freely now would bankrupt the nation and

mortgage economic growth for generations... Nevertheless, it is the clear intention of the government to make steady and substantial progress towards the attainment of these objectives".

In the meantime, a form of hospital insurance was introduced vide the National Insurance Act of 1966 (Kenya, 1966). But concerning the type of health care to be delivered, the independent government accepted the virtues of western medicine as inherited from the colonial administration. The transplantation of western medicine into Third world societies has been criticised on many grounds, the chief one being that unlike in the West, it had not evolved as an organic component of Third world social structures (Banerji, 1984:257). It is clear that policy-makers in Kenya did not wish to question the role and place of Western medicine in health delivery arrangements in the country.

The Content of Policy

Health policy in independent Kenya was first articulated in the 1966-70 Development Plan. The philosophical premise was not only the argument that human health had a major role to play in economic development, but also that it was incumbent on any government devoted to the social welfare of its people to provide adequate health services (Onyango, 1974:115-117). The emphasis in the Development Plan was, therefore, placed on the expansion of health services - bringing health services within the reach of all people, expansion of existing facilities, intensification of staff training, encouragement of medical research and improvement of environmental health etc. But, the source of their financing was not explained.

The 1970-74 Development Plan continued to harp on the same theme. The only difference was the introduction of terminologies like "basic health services" and "primary health" which would later become the key words in health policy vocabulary. The 1974-78 Development Plan was also generally a continuation of the original policy theme. However, two innovations were significant. The first, the shift of emphasis from curative to preventive medicine. Second, the declaration of a comprehensive approach to rural health. The plan declared that "the government will start implementing an integrated and comprehensive master plan for the development of basic rural health services" (Kenya, 1974; 20.10).

There was a decisive shift in emphasis in the 1979-83 Development Plan. The plan summarised the objectives of the state in the area of health services as: i) to strengthen and carry out measures for the eradication, prevention and control of diseases; ii) provision of adequate and effective diagnostic, therapeutic and rehabilitative services for the whole population, offered at hospitals, health centres, dispensaries and mobile units; and

(iii) promotion and development of biomedical and health services research as means of identifying improved and cost-effective methods (Kenya, 1979; 5.3).

The development plan outlined a number of constraints. They were: 1) inadequate and uneven coverage of the population due to insufficient health service delivery centres; 2) inadequate service due to shortage of medical manpower; 3) unsatisfactory manpower utilization, since the majority of staff were deployed in urban areas and in major hospitals; 4) unsatisfactory utilization of equipment and transport due to financial and managerial problems of operation and maintenance; 5) shortages of drugs and other essential supplies due to financial constraints and inadequate distribution system; and 6) inadequate flow of health information and utilization of that information.

The plan outlined measures to overcome these constraints. Although this plan is a replication of previous Plan, it included two innovations - rural health system and the importance of TM. In addition, the 1989-93 Development Plan includes two interesting dimensions of health policy. First, the transfer of the financial burden for providing health services from the state to the individual. Second, a commitment to the promotion of the welfare of traditional medical practitioners (10.4 and 10.49). The Plan also includes the ideals of the Alma Ata Declaration i.e., "health for all by the year 2000" (10.244) and primary health care as the best method of achieving this goal (10.37).

Due to various constraints and obstacles, these development plans, by and large, failed to achieve their stated objectives. It seems that subtle and sometimes radical policy adjustments were introduced from time to time in the hope that these may enhance the chances of realisation of stated goals. One such adjustment was the recognition of TM.

TRADITIONAL MEDICINE IN KENYA'S HEALTH POLICY

The Colonial Legacy

Unlike western medicine, the colonial administration did not develop a legal and institutional framework for TM. The practice of TM existed on the periphery of western medicine and health care arrangements. When witchcraft was outlawed, no attempt was made to distinguish it from TM (Mutungi, 1977). The practitioners of TM were not accorded any professional status. Thus, independent Kenya found a struggling and marginalized institution of traditional medicine. The policy response of the new government was going to determine not only the role which TM was to play in health care arrangements but the pace and direction of its development as well. Unfortunately, the policy response on the part of the state was very slow. It was only during 1970s that the institution of TM was

incorporated into the health policy framework.

Factors Influencing The Recognition of Traditional Medicine

There were at least five factors that influenced policy-makers and planners to recognise the TM as a positive contributor to health delivery arrangements: (i) the persistent inadequacy of western medicine and its inaccessibility to the majority of Kenyans. It must be remembered that marginalization of TM created a gap which western medicine was unable to fill. After independence, with an ever increasing population, there was a rise in demand for medical services. This demand could not be met through the formal hospital and dispensary system. So, in addition to private-sector health arrangements, TM was considered important. (ii) The role and influence of the World Health Organisation. In spite of foreign aid, it was not possible to secure the basic needs for all people. It was slowly recognized that the only sure path to development in the Third World is through the mobilization of each country's own indigenous resources (Sandbrook, 1983). The World Health Organization has been urging its member countries to fully utilize all available local health resources including traditional medicine (Akerlele, 1984). (iii) The third influence was "cultural nationalism", the drive by Kenyans to assert their indigenous culture. (iv) The example of health policy in other Third World countries. In countries like China, India, Nigeria, Zaire and Tanzania, TM has been recognised, and given a respectable role in health policy. Kenya could hardly ignore developments taking place in these countries. (v) The final factor was the positive outcome of research carried out in many countries on traditional materia medica that showed that they were effective against many diseases.

The Role of Traditional medicine in Health Policy

The first reference to TM in health policy appeared in the 1979-83 Development Plan. It was stated in the Plan that a major gap of information relating to the private health sector, both traditional and modern, had existed throughout previous Plans. It was then proposed that during the Plan period, attempts would be made to fill these gaps. The plan identified three points of departure:

- 1) collection of information to determine the importance and relevance of TM;
- 2) exploration of potential link between TM and government institutions; and
- 3) the encouragement of cadres of selected traditional practitioners to serve in government health institutions in the rural areas (5.37).

The 1979-83 Development Plan made many assumptions about traditional medicine based on either ignorance or a preconceived

idea of the role which this system of health care can play in health policy. First, the planners had little idea about the meaning and concept of TM. Second, there was an unjustified emphasis on restricting TM in the rural areas when, in reality, it was present in both rural and urban areas. Third, there was an assumption that TM should supplement the modern medicine in policy arrangements.

LAW AND TRADITIONAL MEDICINE

Historical Perspective

The relationship between law and traditional medicine must be analyzed within the context of the role of law with regard to traditional institutions in general and within the conceptual premise that law was, and still is, used to induce planned social change.

This section deals with four issues. First, it seeks to conceptualize the problem of understanding TM in various legal instruments. Second, it seeks to expose the legal policy of the colonial state towards TM. Third, it will discuss the legal arrangements affecting TM within the colonial society. Finally, it will summarise the impact of colonial law on TM and traditional medical practitioners.

The Meaning of Traditional Medicine in the Legal Instruments

Three legal instruments are relevant to the meaning of TM. They are: i) Native Tribunal Ordinance of 1930, ii) Medical Practitioners and Dentists Ordinance (of 1910, 1926, 1948 and 1963), and iii) Witchcraft Ordinance of 1909. Although the first one was concerned with the jurisdiction of African courts and the substance of the law, no reference was made to TM.

The Medical Practitioners and Dentists Ordinance made reference to traditional medicine. It conceives of the same as "systems of therapeutics according to native method", and proceeds to exempt its practitioners from statutory regulation of medical practitioners. The Witchcraft Ordinance made no specific reference of TM. But in purporting to criminalize the practice of witchcraft, it adopted a vague definition of witchcraft which was apt to confuse (Mutungi, 1979), and did not exclude native medicine as was the case with the corresponding Ugandan ordinance. As a result, detractors of TM tended to subsume it within the meaning of witchcraft and equally condemn its practice. It would seem that the conception of TM in the Medical Practitioners and Dentists Ordinance provided the best legal meaning of TM.

Colonial Legal Policy Towards Traditional Medicine

TM was never formally incorporated into the health policy of colonial Kenya. But its existence was recognized in legislation. As early as 1910, an ordinance (the Medical Practitioners and Dentists Ordinance) was introduced aimed at regulating the practice of medicine in the colony. An important regulatory arrangement was the requirement that practitioners must be registered and licensed. The ordinance however, exempted practitioners of TM from this requirement. It seemed clear that, the authorities did not have faith in the institution of TM, or in its future. The exemption thus came with the following proviso: "provided that nothing in this section shall be construed to authorize any person to practice any Native, Indian or other Asiatic system of therapeutics except among the community to which he belongs, or the performance of an act on the part of any persons practising any such systems which is dangerous to life".

If this proviso is read together with the Witchcraft legislation, three inferences appear to flow logically from their import. First, the reach and relevance of TM was assumed to be restricted. It was not necessary to incorporate TM in health policy as it was a cultural activity domesticated within the backwardness of native society. Second, there were aspects to TM to be discouraged. The Witchcraft legislation discouraged the non-therapeutic aspects by criminalizing activities associated with sorcery, magic and the supernatural. The medical practitioners and dentists ordinance discouraged two aspects of TM - professionalization of the institution outside the community, and the performance of acts deemed dangerous to life - a paternalistic and presumptuous generalization intended to give government officials a free hand to control TM at their discretion. Third, it was assumed that TM was going to disappear sooner or later.

There appeared to have been a policy assumption that, belief in TM resulted from the backwardness of Africans. When referring to witchcraft, Seidman (1965) contends that, with modernization such belief systems would disappear. Mutungi (1979) reports a similar assumption on the part of policy makers and scholars.

Traditional Medicine and the Regime of law

Two issues are important to be discussed in this section.

- 1) What was the disposition of colonial law towards traditional medicine?
- 2) How did that law interact with traditional medicine?

With respect of issue (1), it should be noted at the outset that the disposition of colonial law towards TM was ambivalent. It denied an opportunity for the professional development of TM, while

facilitating procedural and normative arrangements for its justifiability. With respect to issue (2), a complex range of legal instruments outlined a less than enthusiastic legal recognition of TM. It is easy to appreciate this complex interaction by considering three regimes of law: the criminal law framework, the civil law framework, and the general law.

a) The Criminal Law Framework

In its narrow sense, TM was not criminal. As early as 1910, the Medical Practitioners and Dentists Ordinance already granted legal recognition of TM and its practitioners, and provided that they could practice within their communities without registration, licence or other form of regulation. The precise wording of this provision, however, tended to create more problems.

There were three qualifications to the freedom of practicing TM: (i) the practitioner must be trained in TM, and recognized by the community to which he belongs. It is difficult to see how such recognition is to be manifested. It was not clear what sanctions, if any, were to be put on any person purporting to practise TM without such recognition. (ii) The practise of TM was restricted to the community to which the practitioner belongs. Since the term "community" was not rigorously defined, this provision failed to clarify the position of urban-based TM practitioners, who used to have a multi-ethnic clientele. (iii) The practitioner must not perform any act which is dangerous to life. Again, the Ordinance did not spell any punitive measure for violating this provision.

The regime of law and TM as expressed in the Medical Practitioners and Dentist Ordinance is inchoate. A whole range of legal provisions and sanctions should have been fashioned to buttress the main objective of the Ordinance.

The Witchcraft Ordinance was a better developed one. The burden of the Ordinance was to prohibit the practice of witchcraft and discourage belief in the same. To the extent that there is a grey area between TM and witchcraft, one can conclude that the non-therapeutic aspects of TM were proscribed along with witchcraft.

b) The Civil Law Framework

There are three questions that appear to reflect the concern of the civil law framework on TM.

- 1) What was the applicable law in civil suits arising from traditional medicine?
- 2) What was the nature and legal content of the relationship between the traditional practitioner and the client?
- 3) Were there express provisions to the applicability of customary law?

The system of English law, to the extent that it introduced regimes of property, contract, and tort laws, was relevant and applicable to TM. As certain matters, in a given situation, were reserved for customary law, this law was also applicable to TM. The specifics of the applicability of customary law was contained in the Native Tribunals Ordinance (1930).

The Native Tribunals Ordinance empowered Provincial Commissioners to establish native tribunals, in accordance with the native custom of the area. The native tribunals were to have full jurisdiction over cases and matters in which all the parties were natives or resided within the area of the jurisdiction of the tribunal. The Ordinance stated "the civil jurisdiction of a native tribunal shall extend, subject to the provisions of the Ordinance, to the hearing and determination of all civil suits and matters in which the defendant is ordinarily resident within the area of the jurisdiction of the tribunal or in which the cause of action shall have arisen within the said area".

The Ordinance provided that a Native tribunal shall administer: a) the native law and custom prevailing in the area of the jurisdiction of the tribunal, so far as it is not repugnant to justice of morality or inconsistent with the provisions of any order of the King-in-Council or with any other law in force in the colony; b) the provisions of all rules or orders made by a Provincial native authority under the Native Authority Ordinance and in the area of the jurisdiction of the tribunal; c) the provision of any Ordinance which the tribunal is by or under such Ordinance authorized to administer; and d) the provisions of any law which the tribunal may be authorized to administer by an order of the Governor...".

The residual law, to be applied in civil matters, affecting TM was customary law. However, no provision was made for the recognition and the protection of the intellectual property in traditional therapeutic methods or knowledge of medicinal plants. The nature and legal content of the relationship between a traditional practitioner and his client was contractual, and must be governed by the law of contract. In this core relationship, there was interest of the wider society, which was protected by means of the law of tort and by the sanction of property arrangements. The applicable law was the imposed English law of tort and of property.

c) The General Law

The focus of the general law affecting TM should centre on the following considerations: 1) the development of the institution of TM, 2) the professionalization of traditional medicine, and 3) institutional organization and training of practitioners. All these were not provided for in the general law. There was no freedom of association in colonial Kenya. Traditional medical practitioners

could not form professional associations. In legislating the medical profession, TM was excluded, and was denied of the benefit of statutorily defined professional protection and development.

Impact of Colonial Law on Traditional Medicine

Colonial law and legal policy did not have a positive impact on traditional institutions, but discouraged their role to facilitate the process of modernization. A legal and institutional order was established which:

- 1) confined the practice of TM within native ethnic communities;
- 2) abstained from supervising, organising or coordinating the delivery or development of the service of TM;
- 3) failed to define the legal content of the relationship between the practitioner and his client;
- 4) encouraged professional development of western medicine at the expense of TM; and
- 5) refused to recognise the intellectual property rights of the knowledge of traditional practitioners.

Law and Traditional Medicine in Independent Kenya

After independence gradual changes in the policy on TM took place. In the constitution, personal freedom and human rights were guaranteed (Ghai and McAuslan, 1970). Practitioners of TM and their clientele could and did take advantage of this new relaxed legal environment, but tensions remained in the relationship between policy and law. The professional development of TM also continued to suffer because of lack of legal innovation. This section analyses these developments in two stages: the legal regimes and impact of law and policy.

The Legal Regime and Traditional Medicine

a) The Criminal Law:

The colonial position was maintained until 1977 and in the same year, the Medical Practitioners and Dentists Act was substantially amended. The amendment repealed the provision that exempted the practitioners of TM from the compulsory registration requirement. Technically, it would appear that the practice of TM was illegal unless the practitioner was registered by the Board.

b) The Regime of Medical law

Medical practice in Kenya is principally governed by the Medical Practitioners and Dentists Act - even though other statues on health professions could be relevant. The Act requires that a person wishing to be registered as a medical practitioner must have to undergo a prescribed program of academic, professional and

practical training; and prohibits the practice of medicine without such registration by the Medical Practitioners and Dentist Board. The exception to this rigid requirement is to be found in section 13, which empowers the Board to license an otherwise ineligible person to practice medicine.

It would appear reasonable to infer that there was a possibility that traditional practitioners legitimately could offer medical services, but only if they were licensed by the Medical Practitioners and Dentists Board - as an exception to the general rule. It is not entirely clear if their practice otherwise is a criminal offence - or just a disability. What is clear however, is that any person practising medicine without being authorised in accordance with the provisions of the Medical Practitioners and Dentists Act could not recover fees for services rendered. A person duly authorised to practice medicine also invokes immunity in case of negligence and benefits from "professional monopoly" (Abel, 1979:82).

c) The General Law

The formal laws applicable in Kenya were ranked as follows:

- 1) The Constitution
- 2) Legislation (Statute Law)
- 3) The common law, equity and statutes of general application; and
- 4) (with qualifications and limitations) customary law (per Judicature Act).

The general regimes of property law of torts and law of contract affected TM. In appropriate circumstances, customary law is also relevant. But with the unification of the court system and the abolition of the Native Tribunals (Cotran, 1967), the applicability of customary law must be interpreted with reference to the Judicature Act which provides that

"The High Court and all subordinate Courts shall be guided by African customary law in civil cases in which one or more of the parties is subject to it or affected by it, so far as is applicable and is not repugnant to justice and morality or inconsistent with any written law, and shall decide all such cases according to substantial justice without undue regard to technicalities of procedure and without undue delay" (S.3(2)).

If no other specific provisions of law affect traditional practice, or any justifiable aspect of it, the matter must be resolved with reference to the general law. The general law is important for other reasons as well. It facilitates interaction of groups and individuals in society. This aspect of the general law is covered in Public Law, more specifically, the law of

associations. The freedom to associate is a fundamental constitutional right, the enjoyment of which is facilitated by the provisions of the Societies Act. Practitioners of TM have taken advantage of this freedom to form and join associations of practitioners. Although it is not exactly clear what the status of these associations are (i.e. whether professional associations, trade union or mere societies), this development is probably consistent with the policy on TM. It may also be noted that the Ministry of Health and the provincial administration require the "registration" of TM practitioners. It is not clear under which particular law the registration requirement is invoked. The purpose of registration is also not stated, as it is known that non-registration is not a disability of any kind. What is even more curious is the fact that, apparently no criterion of qualification for registration is provided in policy or law. It appears that a TM practitioner is entitled to be registered on the basis of membership of a society of practitioners. At the same time, a practitioner is entitled to join such a society on the basis of registration.

Impact of Law on Traditional medicine

A few preliminary points should be made before considering the actual impacts of law on traditional medicine. First, although there have been significant policy innovations in the post-colonial era, there are no new legal arrangements to implement them. Second, the policy of legal abstention which started in the colonial era has continued to be the primary legal strategy. The disadvantages of that policy therefore continue to manifest. Third, even though the idea of using law to induce purposive social change must be considered to have provided the rationale for the overall legal framework, there appears to be an implicit assumption that TM has run its course, and therefore does not deserve any more legal attention. This explains the subsequent repeal of section 23 of the Medical Practitioners and Dentists Act. In a serious and rather tragic sense, health policy and legal policy were at cross purposes with regard to traditional medicine.

The impact of the current legal arrangements on TM may then be summarized as follows:

- 1) The alienation of TM, started in colonialism, has continued. Although the institution is popular, its role is marginalised.
- 2) The current legal arrangements have frustrated the institutional and professional development of TM. Such development would be possible only if a legal framework analogous to the Medical Practitioners and Dentists Act existed for the professional regulation and development of TM.
- 3) The most pervasive impact of the current legal arrangements on TM has been the flourishing of the

institution and its practice outside any legal framework with all the attendant having negative implications. These include: (a) quackery, the invasion of the practice of TM by imposters who gain access in the absence of standards for vetting; (b) absence of ethical standards; (c) the plunder of the intellectual property rights of TM practitioners by pharmaceutical companies and medical researchers; and (d) failure of the institution to develop and become self-sustained.

REGULATION OF TRADITIONAL MEDICINE

The fundamental argument guiding this study was that, legal regulation of TM was necessary for its development and contribution in the health care delivery. In order to propose a meaningful framework for that purpose, it is necessary to examine the legal arrangements for the regulation of other health professions in Kenya.

Legal and Institutional Framework For Regulation of Health Professions in Kenya

Five health "professions" have been recognised by statutes in Kenya. They are: medical practitioners, dentists, pharmacists, nurses and clinical officers. These are the only health professionals if recognition, by statute, is an essential characteristic of being a profession. But as there is neither statutory definition of a profession, nor a declaration that statutory recognition has anything to do with professional status, this assumption may not be reasonable. Recognition by statute is only intended to facilitate regulation.

The basic strategy of professional regulation is maintaining registers of practitioners deemed competent. The efficacy of the registers is then supported by the creation of monopolies, and by the use of the criminal law to protect professional titles (Jacob and Davies, 1988). For purposes of maintaining the register, Boards or councils are created in respect of every regulated profession. The following sections describe the legal regimes regulating the five health professions.

a) Medical Practitioners and Dentists

Medical Practitioners and Dentists are regulated under the Medical Practitioners and Dentists Act. The regulatory functions of the statute are performed by a Board, known as the Medical Practitioners and Dentists Board. The membership of the Board is constituted as follows:

- 1) a chairman to be appointment by the Minister for Health,
- 2) the Director of Medical Services,

- 3) a Deputy Director of Medical Services to be nominated by the Minister for Health,
- 4) four medical practitioners to be nominated by the Minister for Health,
- 5) a representative of the Faculty of Medicine, University of Nairobi, and
- 6) five medical practitioners and two dentists to be elected by their fellow professionals.

It is a requirement of the statute that all members of the Board must be citizens of Kenya who are either medical or dental practitioners of good character and standing. The board has four functions: i) supervision of the training of practitioners and approval of their registration, ii) licensing of non-qualified persons to practice medicine or dentistry, if it is satisfied that it is in the public interest to do so, iii) licensing practitioners to practice privately, and iv) discipline of practitioners.

There are elaborate qualification requirements for those who wish to be registered. A person is eligible for registration if he has a degree, diploma or other qualification recognized by the Board. In addition, the person must satisfy the board that i) after obtaining the required qualification, he has been engaged in professional training in an institution approved by the Board for a period of not less than one year, ii) whilst so engaged, he has acquired sufficient knowledge of, and experience, in the practice of medicine or dentistry as the case may be, and iv) he has a good moral character and fit to be registered under the Act.

The legal effect of registration is that, the same rule entitles the person registered to practice medicine or dentistry in a salaried post under a government or local government health scheme or in such salaried posts in such institutions as the Board may from time to time approve. A person who wishes to engage in private practice must apply for additional license. Fees may not be recovered by a person not licensed to practice privately; and professional title is protected through the use of the criminal law. The Board has extensive power of discipline over practitioners. It may remove the name of a practitioner from the register or cancel any license granted to such person if: i) the person is convicted of an offence under the Act or under the Penal Code (Kenya, 1988), or ii) the person is found to have been guilty of any infamous or disgraceful conduct in a professional respect - serious misconduct judged according to the rules written or unwritten which govern the medical and dental professions.

b) Pharmacists

Pharmacists are recognized and regulated by the Pharmacy and Poisons Act. The Act empowers the Minister responsible for Health to appoint a Board known as the Pharmacy and Poisons Board. The composition of the board is as follows:

- 1) the Director of Medical Services - the Chairman,
- 2) the chief pharmacist,
- 3) four pharmacists chosen from a panel of names submitted by the pharmaceutical society of Kenya,
- 4) two medical practitioners, and
- 5) the Director of Veterinary Services or a veterinary surgeon nominated by the director.

In the statutes it is provided that a register of pharmacists shall be kept in a prescribed form. Every person who either is a registered pharmacist, or satisfies the Board that he holds a qualification which the Board considers acceptable, is entitled to have his name in the register. The effect of registration is that it entitles the person to carry on the business as a pharmacist. In the matters of discipline, the Board is empowered to refuse registration or delete from the register, the name of a person otherwise qualified who has been at any time convicted of a criminal offence or been guilty of misconduct. The monopoly created for pharmacists is shared in varying degrees with medical practitioners, dentists, veterinary surgeon and medical staff of hospitals. It is strange, however, that the statute does not empower the Board to participate in, control the education or curriculum of pharmacists.

c) Nurses

The nursing profession is regulated by the Nurses Act. The Act establishes a council known as the Nursing Council of Kenya. The membership of the council is composed as follows:

- 1) the Director of Medical Services;
- 2) the Chief Nursing officer;
- 3) one person nominated by the Minister for Education;
- 4) two persons representing religious organizations providing health services;
- 5) four persons nominated by the members of the outgoing council;
- 6) one registered and one enrolled nurse nominated by the National Nurses Association of Kenya;
- 7) three registered community health nurses elected by community health nurses; and
- 8) two registered psychiatric nurses elected by psychiatric nurses.

The chairperson and vice chairperson are to be elected annually from among members of the council who hold office for a period of three years. The functions of the council are:

- 1) to establish and improve standards of all branches of the nursing profession and to safeguard the interests of all nurses;

- 2) to establish and improve the standards of professional nursing and of health care within the community;
- 3) to make provision for the training and instruction, a function exercised with the approval of the minister;
- 4) to prescribe and regulate syllabuses of training instruction - with the approval of the minister;
- 5) to recommend to the minister for approval of the institutions for training;
- 6) to prescribe and conduct examinations;
- 7) to prescribe badges, insignia or uniforms to be worn by persons registered or enrolled or licensed under the Act;
- 8) to take disciplinary measures as may be necessary to maintain proper standards of nursing care in health institutions;
- 9) to direct and supervise the compilation and maintenance of registers and records required to be kept under the relevant provisions of the Act; and
- 10) to advise the minister on matters concerning all aspects of nursing.

In order to carry out its duties effectively, Section 10 of the Act requires the council to appoint the following standing committees: 1) Financial, 2) General Purposes, 3) Investigation, and 4) Registration. The council is also empowered to appoint other committees as it may, from time to time, deem necessary for effectively carrying out its functions.

In accordance with the provision of the Act, nurses may be either registered or enrolled. Foreign trained nurses may be licensed to practice in Kenya. For the purposes of registration, the registrar is required to maintain five separate registers on the basis of the nurses' specialization. Registration, enrollment or licensing entitles the recipient to professional and occupational monopolies. These include the right to take and use title appropriate to the register or roll on which his/her name appears, and the exclusive monopoly to be employed as a nurse in a health institution. The Nurses Act provides the most exhaustive scheme of professional regulation among the health care professions in Kenya. Three features of this scheme are worth mentioning. First, the Act defines the functions of the council in greater detail than do other similar regimes of regulation. Second, the nurses' scheme legislates on standing committees, and on their functions. Third, the scheme provides for greater professional representation than any other similar scheme of regulation.

d) Clinical Officers

Clinical Officers are statutorily regulated under the Clinical Officers Training, Registration and Licensing Act. The Act creates a council known as the Clinical Officers Council which is constituted as follows:

- 1) the Director of Medical Services;
- 2) the Registrar of Clinical officers;
- 3) two Medical Officers of Health;
- 4) at least two and not more than four Clinical Officers;
- 5) one Medical Officer nominated by the Faculty of Clinical Medicine at the College of Health Professions; and
- 6) seven Clinical Officers, three of whom shall be licensed to engage in private practice, elected by the Kenya Clinical Officers Association.

The chairman of the council is appointed by the minister while the deputy is elected by the council. The council has seven statutory functions:

- 1) to assess the qualification of Clinical Officers;
- 2) to ensure the maintenance and improvement of the standards of practice and to supervise the professional conduct and practice of Clinical Officers;
- 3) to maintain the register of Clinical Officers and keep a record of all Clinical Officers registered under the Act;
- 4) to register and license Clinical Officers;
- 5) to take the necessary disciplinary measures in cases of violations of professional conduct and discipline;
- 6) to collaborate with other health professionals in furtherance of functions of the council; and
- 7) to consider and deal with any other matter pertaining to clinical officers including prescribing badges, insignia or uniforms to be worn by Clinical Officers.

To qualify for registration as a Clinical Officer, a person have to: (1) be successfully completed a prescribed training course at an approved training institution, (2) apply for registration in the prescribed form, (3) to pay the prescribed fees for registration, and (4) be fit to be registered.

The legal effects of registration are that a person registered is entitled to render medical or dental services in any medical institution in Kenya, and becomes eligible after ten years for private practice licence. A number of limitations are imposed on Clinical Officers with reference to private practice. They are:

- 1) a licensed Clinical Officer engaged in private practice may only treat certain ailments;
- 2) such a clinical officer may only handle and issue prescriptions for drugs and equipment; and
- 3) no Clinical Officer engaged in private practice can keep open his clinic unless he is physically present for more than eight hours a day.

Clinical Officers licensed to engage in private practice are entitled to charge fees for the medical or dental services rendered, and are required to observe the same code of professional

conduct and discipline as contained in the Code of Professional Conduct and Discipline issued by the Medical Practitioners and Dentists Board.

THE ADVANTAGE OF LEGAL REGULATION

There are many advantages of a comprehensive legal framework for the regulation of TM. Legal regulation means legal recognition, that is, practice of TM can take place lawfully. Both practitioners and clients will be able to enforce contractual obligations and privately regulate the practice of TM. As it stands now, there is no legitimate expectation which society can legally or morally require of a TM practitioner since the law does not recognize them.

Another advantage of legal regulation is professionalization. The need to professionalize TM has been recognised and discussed in many countries (IDRC, 1980; Twumasi, 1984). Although other forms of interventions are also required to make the professionalization of TM effective, a legal framework is essential. Law must be made to "recognize" the professional status of TM and then provide a framework for the enjoyment of immunities and advantages associated with that professional status. In turn, professionalization of TM brings the advantages of standardization of training and practices, internal autonomy, self-regulation and monopoly.

A LEGAL FRAMEWORK FOR REGULATION OF TRADITIONAL MEDICINE

The example of the legal regimes regulating other health professions in Kenya suggests that a comprehensive legal framework for the regulation of TM should provide four central matters: a Board or Council, a Professional Association, a minimum qualification based on systematic training, and a Code of Ethics.

a) Board or Council

At the centre of regulation arrangements for all the other health professions, there is a board or council. The norm has been that the board or council exercises the control and discipline but is dominated by professionals from the various health professions. A similar arrangement should be made for TM with variations. It is desirable to provide for a more broadly composed board or council so that the interests of the wider society can also be taken into account. It is suggested that membership of the board or council should be constituted as follows:

- 1) A Chairperson, to be appointed by the Minister for Health;
- 2) A Deputy chairperson, to be elected by practitioners of traditional medicine;
- 3) The Director of Medical Services;
- 4) The Director of Culture;
- 5) Representatives of practitioners ;

- 6) Representatives of the medical profession;
- 7) The Chairman of Kenya Consumers Association; and
- 8) Four or five other Kenyans appointed by the Minister for Health.

The functions of the Board or Council should be supervision of training, approval of registration and licensing, and development and enforcement of the code of ethics.

b) Professional Association

A strong national association of practitioners of TM is necessary to mobilise members in the Board or Council, and to represent their professional interests in various fora. No new law is required to facilitate the formation of such an association, as a constitutional right to free association has already been a part of the legal culture of Kenya. In fact, there are associations of practitioners of TM duly registered as societies. But a new law is necessary both for compelling membership as a professional requirement, and recognising such an association as a professional body.

c) Minimum Qualification

The law has to develop objective criteria for determining a qualified person to practice TM. This arrangement has to be operationalized through a vetting system, using legal instruments like licensing or registration. But the actual "technical ability" of the practitioner should be ascertainable or at least be capable of being trusted.

As a legal problem, this requires a guidelines for training, and standards of achievement which a practitioner must attain. It is suggested that both the apprenticeship system of learning and formal training in approved institutions should be recognised as capable of equipping a practitioner to practice. A discretionary system of recognition based on appropriately phrased legal power given to the board or council to register and license any practitioner who in their opinion is qualified, as recognized by the appropriate community, should also be used to supplement the formal system of vetting and registration.

d) Code of Ethics

A formal code of ethics, analogous to the code developed for medical practitioners under the provisions of the Medical Practitioners and Dentists Act, should be developed and be made legally binding on all practitioners. Board or Council may be given this responsibility in consultation with the Health Minister and the Attorney General.

REFERENCES

1. Abel, R.L. 1979. "The Rise of Professionalism", British Journal of Law and Society, vol.6, No.1.
2. Adalja, K.V. 1962. "The Development of the Medical Services in Kenya", East African Medical Journal, vol. 39, PP.105-114.
3. Akerele, O. 1984. "WHO's Traditional medicine Program: progress and perspectives". WHO chronicle, pp. 77-81.
4. Aubert, V. 1979. "On Methods of Legal Influence" in Burman and Harrel-Bond (eds). The Imposition of Law, Academic Press.
5. Bannermann, R.H. 1983. "The Role of Traditional Medicine in Primary Health care". Traditional Medicine and Health Care Coverage, WHO, Geneva.
6. Beck, A. 1970. "A History of the British Medical Administration of East Africa". Cambridge, Mess.
7. ----- . 1974. "History of Medicine and Health Services in Kenya, 1900-1950", in Vogel, L.C. et al. Health and Disease in Kenya, Nairobi, Kenya Literature Bureau.
8. Bernet, F.J., and Maneno, J. eds. 1986. "Guidelines for the Implementation of Primary Health Care in Kenya, Nairobi". Govt. of Kenya.
9. Carman, J.A. 1976. "A Medical History of the Colony and Protectorate of Kenya". London: Rex Callings.
10. Colins, H. 1987. "Against Legal Abstentionism in Labour Law" in Eekejaar and Bell, eds., Oxford Essays in Jurisprudence, 3rd series, Clarendon Press, Oxford.
11. Cotran, E. 1967. "Integration of Courts and Application of Customary Law in Kenya". East African Law Journal, vol.4.
12. Fitzpatrick. 1980. "Law, Modernization and Mystification 3, Research in Law". Social Control and Deviance. JAI Press.
13. Ghai, Y. and McAuslan, Y. 1970. "Public Law and Political Change in Kenya". Oxford University Press.
14. Gilks, J.L. 1922. "Annual Medical Report".
15. Good, G.M. and Kimani, V.N. 1980. "Urban Traditional Medicine: A Nairobi Case study". East African Medical Journal, vol.57, Number 5, pp. 301-316.

16. Hart, H.L.A. 1961. "The Concept of Law". Oxford University Press.
17. I.D.R.C. 1980. "Traditional Medicine in Zaire". IDRC, Ottawa.
18. Katz and Katz. 1981. "The Evolving Role of Traditional Medicine in Kenya". African Urban Studies, no.9.
19. Kahn Freund, O. 1944. "The Illegality of a Trade Union" 7. Modern Law Review, 192.
20. Kenya, Rep. of. 1974. "Development plan, 1970-74". Govt. Printer, Nairobi.
21. ----- 1974. "Development Plan, 1974-78". Govt. Printer, Nairobi.
22. ----- 1979. "Development Plan, 1979-83". Govt. Printer, Nairobi.
23. Merryman, J.H. 1977. "Comparative Law and Social Change: On the Origins, Style, Decline and Revival of the Law and Development Movement". The American Journal of Comparative Law, vol.25.
24. Milne, A.D. 1928. "The Rise of a Colonial Medical Services". Kenya and East Africans Medical JOURNAL, 51 ff.
25. Mungai, J.M. 1974. "Medical Research" in Vogel et al., ibid.
26. Mutungi, O.K. 1977. "The Legal Aspects of Witchcraft in East Africa". Nairobi, EALB.
27. Okoth-Ogendo, H.W.O. 1984. "Development and the Legal Process: An Analysis of the Role of Law in Rural Development Administration". International Journal of the Sociology of Law, vol.12.
28. Oklthowiro, A. 1992. "The Regulation of Health Professions in Kenya". Project Report, Law and Traditional Medicine in Kenya.
29. Onyango, Z. 1974 "Health Facilities and Services in Kenya". in Vogel, et al.
30. Sandbrook, R. 1983. "The Politics of Basic Needs" (CUP).
31. Seidman, R.B. 1975. "Law and Development: The Interface Between Policy and Implementation". Journal of Modern African Studies, vol.13.

32. Sindiga, I. 1987. "Ethno-medicine, Bio-medicine and Health Care Delivery in Kenya". Department of Geography, Kenyatta University staff Seminar Paper.
33. Twumasi, P.A. 1984. "Professionalization of Traditional Medicine in Zambia". IDRC, Ottawa, Canada.

Traditional Knowledge And Gender: The Caribbean Experience

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The Caribbean consists of islands and territories ranging from Central America in the north, sweeping south wards to the mainland territory of Guyana, South America and the chain of islands in between. The region includes a range of ethnic and cultural influences and a variety of language speaking groups such as English, French, Spanish, Dutch as well as Creole languages. Very little remains of the indigenous peoples who originate in the region. They were the first victims of diseases and enslavement that resulted from the contact with Europeans. Although the region is diverse and complex, there are some similarities between territories yet each possesses its own uniqueness that arises from the bringing together of people from the contrasting cultures of Africa, Europe and Asia. This presentation will focus primarily on the realities of the English speaking territories and how the effect of colonization influenced on the knowledge and practices of the colonized peoples of the region.

The most common experience of all territories has been the colonization. We were, and in some cases still remain, colonies of Europe and/or North America. It was under the colonial administration that the issues of power, control and the development of our formal systems of health care began to take place. The Chief medical Officer was part of colonial administrative system and it was the western medical model of health care that was introduced and gained dominance, i.e., the concept of disease, causality, signs and symptoms treatment, the provision of institutional based services and the "medicalization" or "professionalization" of health care was part and parcel of the system. While this system from Europe gained dominance other non-traditional systems of health care were marginalized, dismissed and made illegal by the colonial state.

Orlando Patterson in his work, "The Sociology of Slavery" describes the patterns that developed in Jamaican society in relation to the structure and functioning of plantation society, the political system, the social organization of life and work on the plantation as well as the cultural dimensions. He writes:

"Among the skilled slaves are included the boilerman, carpenters, smiths, coopers, masons, doctors, nurses and midwives. On Orange River estates in 1823 among the slave population of field negroes, carpenters, blacksmiths.. were two doctors, one doctress and two midwives. Mothers in Jamaica came from both the African and Creole groups thus we should expect that many of the rites and taboos relating to birth and

early infancy in Africa would have been practised by African mothers".

Patterson goes on to make the distinction between Obeah (bad medicine) and Myalism (good medicine). Obeah is described as a type of Sorcery, largely harmful which was performed at the paid request of clients by use of charms, poisons and shadow - catching and approximates to West African bad medicine. Whereas in Myalism, proponents were aware of the teachings of Obeah men but used them for good rather than evil. Myalism was not individually practised but organized more as a cult with a unique dance ritual approximates and to West African good medicine. Its practice involved the use of herbs or narcotics. Most slaves would only allow themselves to be treated by black doctors.

Resistance to slavery and oppression was also a part of the struggle. During the seventeenth and eighteenth centuries in Jamaica where the most documentation exists, a series of laws were enacted to prevent rebellions. These laws were passed in 1684, 1696, 1717, 1744, 1781 and 1826 expanding or adding new dimensions to the systems of social control. The laws were aimed at prohibiting the assembling of slaves, the beating of drums, groups, and the use of poisons. It was in the assemblies that the religious tribal dances were accompanied by the use of drums which were perceived by the planters as a preliminary to uprising and rebellions. The laws gave powers to plantation owners, their family members and overseer to regularly search, confiscate and burn weapons or potential weapons of slaves. By 1696, this category of weapons was expanded to include poison that any person could be regarded as guilty of murder for using a poison. Part of the systems of social control included the preventing of meetings on Sundays and holidays. In 1717, powers were expanded to prevent the visiting of any "strange negroes" from assembling on any plantation. In 1744, "any crime of compassing and imagining the death of any white person by any slave or slaves" was deemed a crime as high as the crime of murder.

It is clear that in the minds of the planters and the legislators that the boundaries between the practice of myalism, obeah, various African Cultural forms such as, drumming, gatherings and uprisings were very indistinct and were viewed as threats to the social order. As a result these practices would have gone underground. Much of the documentation was written by the British and reflects their perspectives on African cultural forms within a context of struggle of maintain a social system in which the interests of planters and the administrators of the colonial state were diametrically opposed to those of the large slave population.

What is significant is the fact that in West African culture (Ashanti and Dahoman) there was an understanding of the interconnection between mind, body and spirit, that a healing process would include prayer, incantations, the laying on of hands,

the use of herbs, baths and potions. This interconnection of mind, body and spirit has not been strong in western orthodox medicine and is only gradually being recognized in some circles. Despite the holistic environment, some of this traditional knowledge has survived, I believe, that this is so because of the central role women played in the practice of midwifery, and the care of children which gave them a space in which to function and to apply their knowledge of healing. This knowledge was passed on from one generation to another, from mother to daughter or through a form of apprenticeship based on interest and aptitude. The midwives were customarily women of the district or community who had gained their skills in a very practical way. The limited knowledge of principles of hygiene and asepsis combined with virtually no ante-natal preparation and often poor physical and nutritional states of mothers took their toll in terms of high maternal and infant mortality rates. It is probably these factors that raised the concern of the medical profession.

A study carried out by the International Confederation of Midwives in the 1970s showed that in Haiti, midwives delivered as many as 80 percent of births. In Jamaica, during the same time 25 percent of the deliveries in the rural areas were being done by midwives while in Barbados, 96.9 percent of births took place in hospitals and medical institutions. The level of poverty, size of the territories, the contrasting conditions in urban and rural areas may help to explain some of these disparities.

Emerging from the riots and unrest of the 1930s a new nationalist leadership generated power, committed to the social development of the region. This leadership emerged from the beginnings of the labour movement in the British Caribbean, education and health were the sectors earmarked for improvement and development. The health strategies used varied in the territories. In Guyana for example, the knowledge and skills of traditional midwives were upgraded and they were incorporated into an overall comprehensive health care scheme. In Jamaica, although the practice was quite prevalent they were not officially recognized, while in Barbados, it was made illegal. Women were therefore increasingly loosing ground in this area of work. The institutionalization of health care brought its own problems - there was shortage of beds, overcrowding of wards and the importation of ideas and methods adopted in European countries meant a reliance on extensive and expensive equipment reducing the possibilities for the development of health care at a more domiciliary and community level.

Only in recent times, and particularly in the context of our worsening economic situation where imported medicines and treatments are becoming more expensive are we beginning to recognize the value and contribution that traditional knowledge of medicines have and can play. We also recognize the benefits and limitations of some orthodox approaches, that they have been particularly successful in addressing the infectious diseases that

were once prevalent in our region, but have had serious limitations in addressing the non-communicable diseases that we now face. We have also awakened to the fact that many of the expensive medicines we buy are in some cases based on the traditional knowledge of our own herbs and as well as other people's for which the pharmaceutical companies have gained license. Our historic struggle for the right to practice our knowledge and skills has not been unlike the struggles in Britain and North America of other women healers who in Europe were burned at the stake for witchcraft or the battle that midwives lost in North America against the male obstetricians. At the crux of the matter, is the use of power by influential groups to marginalise and outlaw the practices of others based on belief systems.

In the search of rediscovery, we have recognized not only that orthodox medicine has contributed to the significant decline of infectious diseases but also the limitations of compartmentalising knowledge of health. We need the benefit of what other systems and ideas have to offer, and hope that this rekindled interest in alternative systems will not lead to the further exploitation of our knowledge and environments.

Models of Health Care Pluralism

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Introduction

Following the Alma Ata declaration of 1978, which advocated utilizing traditional healers to help deliver primary health care (World Health Organization, 1978), there have been numerous publications on the advantages and problems of incorporating indigenous healing traditions into modern health care delivery systems. This paper will attempt to clarify the different types of relationship that can exist between biomedicine and indigenous healing traditions. This will involve creating a typology which emphasizes two variables: 1) the relationship between biomedicine and indigenous healing traditions in terms of structural equality (legal recognition and access to resources), and 2) the nature of the interaction between biomedicine and indigenous healing traditions (intolerance, collaboration, etc.).

Types of Relationship Between Biomedicine and Indigenous Healing Traditions within the Same Society

1. Intolerant Orthodoxy

In Type 1, biomedicine has a monopoly on health care and uses its power base to prevent alternative healing traditions from obtaining legal status(1). In societies in which biomedicine has this kind of power, it is referred to as the orthodox system and all other systems are considered unorthodox(2). For Example, it was not many years ago that colonial powers persecuted indigenous healers in Africa (Neumann and Lauro, 1982; Freeman and Motsei, 1992) and socialist countries such as the Russia and Cuba decided that only modern scientific medicine would be allowed (Pederson and Baruffati, 1989). Even Canada, which takes great pride in its official policy of cultural pluralism, was intolerant of Native healing traditions until recently (Cardinal, 1969).

This type of intolerance usually did not eliminate indigenous healing traditions but simply forced them underground. According to Lee (1982), many indigenous healing traditions lost their positions of "structural superiority", but they did not necessarily lose their "functional strength". It has been estimated that even after being legally banned, indigenous healers in many societies continued to treat many more patients than did biomedical practitioners. In other words, it is important to make a

distinction between unofficial and official medical pluralism. Although Type 1 societies may be characterized by unofficial medical pluralism, relations between biomedicine and indigenous healing traditions are characterized by structural inequality and intolerance on the part of biomedical practitioners.

2. Tolerant Orthodoxy

In Type 2, as in Type 1, there is a single orthodox healing tradition, but many of its practitioners are tolerant of alternative traditions. In an attempt to provide culturally-appropriate health care, tolerant orthodox practitioners make an effort to understand the beliefs and behaviours of minority patients. This type of tolerant is characteristic of what has been called the "multicultural health care" movement in North America. Masi (1993:7) defines multicultural health as "health care which is culturally, racially and linguistically sensitive and responsive".

An example of tolerant orthodoxy is the argument presented by Gregory (1988:39) that nurses who are providing primary health care to Indian communities "need to be aware of and understand traditional Indian health beliefs and practices if a holistic nursing approach is to be sustained". Another Canadian example is provided by a major hospital in Edmonton, Alberta which has a Native healer in residence. The healer and his wife conduct workshops for hospital staff so that they will have a greater understanding of Native culture and can thus provide better care for the numerous Native patients served by the hospital(3).

It is important to note, however, that in societies characterized by tolerant orthodoxy, alternative healing traditions are not accorded legal status. Unofficial health care pluralism exists in practice, and may even be encouraged, but a single tradition (biomedicine) controls official health care policy and training and licensing of legally-recognized practitioners. In other words, despite its tolerance, biomedicine retains its position of structural superiority.

3. Parallel Independent Traditions

In Type 3, rather than a single orthodox system, there are two or more traditions that legally recognized. Although patients have freedom of choice, there is little active collaboration among practitioners of the different traditions. A good example of this type is found in many African societies where traditional and biomedical clinics exist side by side. Patients frequently go to the traditional clinic for what they consider to be traditional diseases, and to the biomedical clinic for diseases believed to be to have been introduced by the colonial population (Haram, 1991). Although traditional healers may borrow some of the "trappings" of biomedicine (such as white coats) in order to achieve greater responsibility (Twumasi, 1986), there is usually little cooperation

between the personnel of traditional and biomedical clinics.

Another example of parallel traditions is the case of Japan in which clinics specializing in traditional practices such as acupuncture, moxibustion, shiatsu, and herbal therapy(4) provide popular alternatives for many Japanese who are disenchanting with the ability of biomedicine to alleviate chronic conditions (Lock, 1980). These alternatives are legally recognized by the government as long as they meet certain conditions (primarily in the areas of training and licensing of practitioners). It should be pointed out, however, that in Type 3 societies, official medical pluralism does not necessarily imply structural equality. In fact, biomedicine usually is in a position of structural superiority in that it tends to be favoured by government officials, many of whom have been trained in the West and may view their own indigenous traditions as backward or even superstitious (Warren, 1989). Relations among practitioners of biomedicine and traditional medicine is generally characterized by indifference, and the choice of what kind of healer to utilize for a particular condition is left to the patient. In brief, Type 3 societies have official health care pluralism, but at least in terms of interaction among health care practitioners, it is of a passive type.

4. Collaboration and Combination

In Type 4, the practitioners of two or more legally recognized healing traditions engaged in active collaboration, resulting in a combination of therapeutic techniques, or else the beliefs, practices and medicines of two or more traditions are combined by a single individual. Perhaps the most common type of collaboration is for healers from different traditions to refer patients to each other, depending upon the ailment, or for indigenous healers to be included in the official health care system in those parts of the country in which members of their own ethnic group predominate (Dixon et al., 1983).

A more active kind of collaboration is practised in China where "interdisciplinary" teams can consist of biomedical personnel, traditional Chinese medicine practitioners, and even personnel trained in one of the minority traditions such as Mongolian or Tibetan medicine (Young, Ingram, Liu, and MacIntosh n.d.; Cai, 1987; Chen, 1989; Zhang, 1987). The members of the team collectively decide upon an appropriate treatment program. For example, the author observed a patient in a Beijing hospital who was suffering from gangrene of the toes resulting from poor circulation associated with diabetes. He had first been treated with bio-medicinal drugs which had failed to halt the gangrene. The medical team then switched to a traditional herbal plaster which enabled them to save the middle three toes on each foot. This kind of approach is pragmatic in the sense that it does not require agreement among the practitioners concerning the cause of the

problem or even the best solution. They simply agree to try a treatment which has a high probability of success, if it fails, a different type of treatment is initiated. It is also common in China to use two or more methods of treatments simultaneously, rather than sequentially as described above.

Given the tendency in any society for some healing traditions to have more prestige and power than others, active health care pluralism may require government intervention to maintain a balance of power. In China, for example, prior to the Communist revolution, traditional Chinese medicine was rapidly declining in importance because Western medicine had acquired great prestige as a result of its ability to halt epidemics such as cholera. In an effort to counter this trend, legislation was introduced by the Communist regime to create a more level playing field (Lee, 1982). As a result, although biomedicine still carries more prestige than traditional medicine, active collaboration does occur, and Chinese patients who have a choice of utilizing biomedical practitioners, traditional practitioners, or a combination approach, frequently prefer the latter. Although combining techniques from different traditions usually involves collaboration among different kind of practitioners, it is possible for a single practitioner to be trained in more than one tradition.

There is also a growing trend for biomedical physicians to broaden their healing repertoires by borrowing beliefs, techniques, or medicines from other traditions, even though they are not fully trained in those traditions. The fact that these physicians have an official degree in medicine allows them legally to include a kind of co-option. For example, faced with growing popularity of "holistic health care", some biomedical practitioners known to the author are supplementing allopathic treatment with homeopathic or Ayurvedic remedies. Co-option is also involved when indigenous healers are encouraged to share their medicinal remedies with biomedical doctors or pharmaceutical research organizations. While the intentions may be good, such practices do not necessarily lead to increased collaboration among practitioners of different traditions, and may, in fact, lead to a decline of those traditions whose techniques and medicines have been co-opted. This danger is most evident when the traditions being co-opted are in a position of structural inferiority initially.

Another type of co-option occurs when policy makers encourage indigenous practitioners to adopt techniques and medicines from biomedicine to make them more effective healers. In this case, the indigenous healers themselves, rather than their techniques and medicines, are co-opted and they become paramedical adjuncts to a health care delivery system dominated by biomedicine. This seems to be the philosophy behind many of the experiments being conducted in Africa which involve teaching indigenous healers the basic biomedical techniques such as, how to administer oral rehydration therapy or how to improve nutrition (Green, 1987; Warren, 1986,

1989). Health care at the local level is usually improved by such programs, but they require great sensitivity on the part of program organizers in order to prevent damage to indigenous traditions.

What has been described above are variations on the theme of collaboration and/or combination in societies which legally recognize health care pluralism. There are also a variety of experiments being conducted in societies which do not have legalized health care pluralism. For example, in Canada, some hospitals keep a list of Native healers who are willing to visit patients in the hospital. These healers are allowed to counsel Native patients and sometimes to perform religious ceremonies such as burning sweet grass. The author knows of two hospitals which are contemplating to allow Native healers to administer herbal therapy in the hospital, and another hospital which, at the request of the patient, will release the patient for treatment by the healer outside the hospital setting. None of these experiments involving Native healers require the healers to share their medicinal formulas which are usually passed on only to apprentices.

In summary, Type 4 includes a range of options which provide for active collaboration among practitioners of different healing traditions and/or combination of different therapeutic techniques and medicines within the same practice. This more active type of health care pluralism differs from Type 3 which may also expose a patient to different techniques and medicines, but without the cooperation, or even knowledge, of the practitioners involved.

5. Integration

In Type 5, the goal is to synthesize the theory and practice of different healing traditions into a more comprehensive system. This goes beyond collaboration among practitioners from different traditions, or combining different techniques in a single practice. It requires basic research on the physiology and functioning of the human body. For example, researchers in China have tried to develop a theory which would be broad enough to explain the flow of qi through the meridians, as understood in traditional Chinese medicine, as well as the flow of blood through the circulation system. This attempt has met with very little success due to the fundamentally different starting points of traditional medicine and biomedicine. For the most part, the Chinese have had to be content with what they call "combination medicine" rather than a genuine synthesis of Eastern and Western medical theory. From the perspective of this author, combining the best of the different healing traditions in a society into a more comprehensive system, even if feasible, would not necessarily be desirable because it would lead to a new orthodoxy and to the abuse of power which can result in any system dominated by a single healing tradition. In many ways, Type 1 and Type 5 have a good deal in common.

Discussion

To create a typology requires creating logical boundaries which may not exist in actual practice. For this reason, specific cases may not fit neatly into one of the five types. Many of the health practitioners known by this author attempt to do this by coming to a better understanding of the belief systems of their minority patients. Some of these practitioners, however, define cultural sensitivity to include learning specific medical techniques from the traditions of the minority groups being served. In other words, such practitioners combine aspects of Type 2 and 4.

For most purposes, it does not really matter whether a specific case under study is described as a single type or a combination of types. What is important is that policy makers, responsible for designing health care delivery plans, focus on the variables used to create typology, namely: 1) the extent to which biomedicine and indigenous healing traditions should be provided with structural equality, and 2) the different options available in terms of potential interaction among healing traditions. Focusing on these variables, there arises a variety of practical problems. For example, if indigenous healing traditions are to be legalized as part of a program to introduce health care pluralism, there must be some way of ensuring that quality control is maintained. Closely related to the need for quality control is the need for research on the efficacy of indigenous healing traditions. Health care pluralism operates most efficiently when the practitioners of different traditions have some understanding of the limitations of their own therapies and the strengths of other kinds of therapies. This kind of knowledge allows for intelligent referrals and active collaboration among practitioners from different traditions. Although there has been extensive research on the efficacy of many biomedical procedures and medicines, there has been very little systematic and long-term research on the efficacy of alternative healing traditions (Glasser, 1988; Pedersen and Baruffati, 1989).

A particularly contentious issue involved in introducing health care pluralism involves access to resources, such as the remuneration of indigenous healers. Although indigenous healers in some African countries have organized in the hope of gaining official recognition, some traditional healers may not want to be included in a government health care plan. Many North American Native healers, for example, can not accept set fees for their services and do not wish to be bothered with keeping the records and filing the reports required by various levels of government.

From an anthropological perspective, it is important that all issues be solved in such a way that health care pluralism, whenever it is officially introduced in a society, improves the health of the people as well as preserves the integrity of indigenous healing

traditions. If this can not be accomplished, health care pluralism is probably left to operate informally.

Notes

1. Alternative healing traditions can be aboriginal or ethnic in origin, such as Native healing, traditional Chinese medicine, or Ayurvedic medicine in Canada. These are healing traditions which were dominant at one time in their original cultures, but which are considered unorthodox in other countries. Or alternative healing traditions can be based upon specific diagnostic or treatment procedures, some of which were considered unorthodox from the beginning. Examples are homeopathy, iridology, therapeutic touch, and reflexology.
2. Even intolerant orthodoxy may encompass a variety of healing practices, but one group of practitioners within the system has control over the system as a whole, in terms of deciding which practices are legitimate. For example, a biomedically-based system can incorporate practices such as nursing, but it is those with a medical degree which have the power to regulate the system as a whole.
3. This program is being documented by the author with financial assistance from the Social Sciences and Humanities Research Council of Canada. Because the program is still in the trail stage, it cannot be identified at this time. It will be reported in a later publication.
4. While these practices have long been traditional in Japan, they are Chinese in origin and are indigenous. Apart from some knowledge of medicinal plants on the part of elderly Ainu living in northern Japan, healing practices that predate the waves of massive Chinese influence that began very early do not appear to have survived. There are, however, healing practices associated with some of the so called "new religion" which have developed in Japan within the past one hundred years. Since some of these new religions are at least partly of Shinto derivation, they can be considered indigenous. The Japanese situation illustrates the difficulty of defining terms like indigenous and traditional. In this paper, both terms are used more or less interchangeably to indicate healing traditions that were well-established in a society before the introduction of Western biomedicine.

References

Cai, Jinfeng, 1987. "Shao Shu Min Zu Yi Xue Shi" (The History of Minority Medicine). *Zhong Hua Yi Shi A Zhi* (Journal of Chinese medical History): 17(3):139-141.

Cardinal, Harold, 1969. "The Unjust Society: The Tragedy of Canada's Indians". Edmonton: Hurtig.

Chen, Shiqui, 1989. "Wo Guo Zhong Xi Yi Jie He Yan Jiu Ji Gong Zhuo Jin Zhan" (Progress report on integrating traditional Chinese medicine and Western medicine in China). *Shi Yong Zhong Xi Yi Jie He Za Zhi* (The Practical Journal of Integrating Traditional Chinese Medicine with Modern Medicine): 2:67-70.

Dixon, M., W. Myers, P. Book, and P. Nice, 1983. "The Changing Alaskan Experience: health care services and cultural identity". *The Western Journal of Medicine*, 139(6):917-922.

Freeman, M. and M. Motsei, 1992. "Planning health care in South Africa - is there a role for traditional healers"? *Social Science & Medicine*, 34(11):1183-1190.

Glasser, M, 1988. "Short commentary: accountability of anthropologists, indigenous healers and their governments: a plan for reasonable medicine". *Social Science & Medicine*, 27(12):1461-1464.

Green, Edward C, 1988. "An exploration of the contact between nurses and Indian elders/traditional healers on Indian reserves and health centres in Manitoba". In David E. Young, ed., *Health Care Issues in the Canadian North*, pp. 39-43. Boreal Institute for Northern Studies, University of Alberta.

Haram, L, 1991. "Tswana medicine in interaction with biomedicine". *Social Science & Medicine*, 33(2):167-175.

Kleinmam, Arther, 1982. "Concepts and a model for the comparison of medical system as cultural systems". *Social Science & Medicine*, 12:85-93.

Lee, R, 1982. "Comparative studies of health care systems". *Social Science & Medicine*, 16:629-642.

Lock, Margaret M, 1980. "East Asian Medicine in Urban Japan: Varieties of Medical Experience". University of California Press, Berkeley.

Masi, R., L. Mensah and K. McLeod, 1993. "Introduction". In Masi and McLeod, ed., "Health and Cultures: Exploring the Relationships". Oakville, Ontario: Mosaic Press.

Morse, J., D. Young, L. Swartz, and R. McConnell, 1988. "A Cree Indian treatment for psoriasis: a longitudinal study". *Culture* V11(2):31-41.

Neumann, A.K. and P. Lauro, 1982. "Ethno-medicine and bio-medicine linking". *Social Science & Medicine*, 16:1817-1824.

Pedersen, D. and V. Baruffati, 1989. "Healers, deities, saints and doctors: elements for the analysis of medical systems". *Social Science & Medicine*, 29(4):487-496.

Twumasi, P.A., 1986. "The professionalization of indigenous medicines: a comparative study of Ghana and Zambia". In Murry L, and Gordon C, eds., *The professionalisation of African Medicine*, pp. 117-135. The International African Institute and Manchester University Press, London.

Warren, D.M, 1986. "Anthropology and rural development in Ghana". In Micheal M. H and Thomas M. P, eds., *Anthropology and Rural Development in West Africa*, pp. 61-91. Boulder: Westview Press.

-----, 1989. "Utilizing indigenous healers in national health delivery systems: the Ghanaian experience". In John V. Willigen, Barbara R.B and Ann M, eds., *Making our Research Useful Case Studies in the Utilization of Anthropological knowledge*. Boulder: Westview Press.

World Health Organization, 1978. "Primary Health Care: Report of the International Conference on Primary Health Care, Alma Ata, USSR". 6-12 September, 1978. Geneva: WHO.

Young, D., J. Morse, L. Swartz, and G. Ingram, 1988. "The psoriasis research project: an overview". In David E. Young, ed., *Health care Issues in the Canadian North*, pp. 76-78. Boreal Institute for Northern Studies, University of Alberta, Edmonton.

Young, D., G. Ingram and L. Swartz, 1989. "Cry of the Eagle: Encounters with a Cree Healer". University of Toronto Press, Toronto.

Young, D., G. Ingram, M. Liu, and C. MacIntosh, n.d. "The dilemma posed by minority medical traditions in pluralistic societies: the case of China and Canada". Submitted for publication.

Zhang, Xingqian, 1987. "Zang Yi Yao De Fa Zhan Zhuang Kuan" (The developing condition of Tibetan medicine). *Zhong Hua Yi Shi Z Zhi* (Journal of Chinese Medicine History), 17(4):221-224.

**Understanding Traditional Health Systems:
A Sociological perspective**

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Introduction

Human life is inherently frail - from the inevitability of decay and death to that of disease and sickness. Whether following the Parsonian logic or Goffman's model it is called, "assuming a sick role", alleviation of disease and preservation of health, both conditioned by culture, have been a human pursuit since antiquity. Using drugs and diet as remedies for the disruptive episodes in the life process, is not something new. It is as old as human existence. The prehistoric humans derived the therapeutic agents from nature, without maligning the environment. The plant kingdom, since the very beginning of human civilization, served as the reservoir of medicine - therapeutic agents to restore health. Over time, the need to cover a wider variety of disease patterns and to augment the therapeutic potential of these agents, mineral and animal constituents began to be incorporated into this plant-based medicines. Needless to say, this use of natural resources as therapeutic agents was predicted on a unique belief system encompassing the concepts of health, physical or mental illness, diagnosis, treatment and of prevention. The accumulated knowledge of such health practices and products is a rich cultural heritage common to all human societies, sometimes ignored or unrecognized in a formal or institutional sense.

What separates this body of knowledge referred to as "traditional medicine" (TM) for lack of a better term from "modern medicine" is the fact that the latter is anchored in "science", while the former in practical experience. As long as science continued to be narrowly defined, traditional medicine remained largely unnoticed. It took sort of a scientific revolution, a paradigm shift, to draw renewed interest in traditional medicine. Increasingly, the very validity of this "traditional-modern" dichotomy is being questioned. Traditional medicine differ from the "modern" or "western" medicine not in terms of goals or effects, but in terms of their underlying cultures and historical contexts. Viewed from this perspective, the World Health Organization (1977) noted, "all medicine is modern in so far as it is satisfactorily directed towards the common goal of providing health care, despite the setting in time, place and culture". This "traditional-modern" dichotomy is also a cultural construct that relates to certain socio-political dynamics. So, a sociological approach is needed to

analyze and fully comprehend these socio-political factors.

The present paper taps on this renewed interest and attempts to explore the nature of traditional medicine in different countries, analyzes their differential development and examines some of the policy alternatives in bringing about a harmony between the traditional and the modern systems of medicine.

TM: Diversity of Culture

Traditional medicine, its nature, axioms and practices, varies from one country to another, or more precisely, from one culture to another. Even its name, and that of its practices and products, vary from one place to another depending on the socio-cultural heritage, religious and political identity. From China, India, Indonesia to the African states and the indigenous peoples throughout the Americas, there are a variety of systems that may be termed "Traditional Medicine" - the Ayurvedic, Unani, herbal medicine, etc. Although, as noted earlier, for lack of a better term, these diverse systems are lumped together under the rubric "traditional medicine", the term does not really reflect the fundamental nature of these systems. The term "medicine", for example, tend to emphasize the treatment or curative aspect of these systems, ignoring their preventive aspects. Moreover, the term "medicine" neglects diverse practices that encompass any system of TM. In Pakistan, India or Bangladesh, there is the Unani and Ayurvedic systems of medicine. Chiefly based on remedial agents from plants, the Unani system derived its name from Greece - Unan in Persian. It proudly proclaims Aristotle as its founder, being responsible for registering the therapeutic value of thousands of plants. It has its own theories and principles. Long before the WHO declaration, the Unani system considered health, not merely in terms of absence of disease, but as a relative "physical, mental, spiritual and social well-being". This system adopts a holistic approach and considers humans to be an integral part of the totality of the environment. Health implies a state of equilibrium among all the constituent elements of the environment. In such an approach, the individual's social, cultural and physical environment, temperaments, constitution, predispositions, as well as diet regimen, food, compatibilities, living habits and mental composure or spiritual beliefs are considered significant in causation and cure of ill health. Such a holistic perspective on human health is perhaps a common link between all traditional medicines prevalent in diverse settings - from the herbalists and shamans in rain forest areas of South America through to the spiritual healers among the Natives in Canada, Australia, the United States and the Latin American countries.

Philosophy, religion and spirit are central to TM found among the indigenous peoples of the Americas. Traditional medicine, in this case, is intricately tied to the belief system. According to a recent study, their belief system "is built upon the concept of

a balanced universe made up of energy fields. The world, the environment, the community, the family, and the self are interwoven and move in harmony to each other. The medicine wheel reflects this philosophy. It depicts the circularity of life, of energy never being lost, and of continual learning and quest for knowledge. It encompasses the teachings, the values, the beliefs, and the social mores of traditional Aboriginal Indian culture" (Aboriginal Nurses Association of Canada Report, 1993).

Aboriginal Indian culture believes in four components of the self: body (one's physical self), mind (cognitive abilities), emotion (the psychological self), and spirit (spiritual/religious beliefs). These components are intertwined, and for one to be healthy, all these components of the self must be in a state of equilibrium. Good health is God's precious gift; by maintaining good health we are showing our appreciation to the creator. And to maintain good health, one must establish a balance between these four elements of the self. If one element is neglected, an imbalance pervades all other elements and, ultimately, affects the self (Malloch, 1989). For good health, one must establish a balanced relationship with oneself, with family, community, the land and the world. In other words, sickness is being perceived as an imbalance which may begin in the physical or the mental realm; or in the emotional or the spiritual realm.

It is important to note that in the indigenous culture, the term medicine is also defined in a much broader sense than in the western tradition. "Medicines include all things that heal. These can be internal to oneself such as laughter, tears, communication; or it can be external such as, words that one hears, behaves or actions or medical remedies and tonics. Placed within this perspective, TM includes what western scientific medicine calls health practices and behaviours, as well as, medical treatments and remedies. Medicines are believed to be gift from the Creator (ANAC Report, 1993).

The Chinese or Vietnamese TM practitioners may differ in vocabulary and formulary from their Pakistani, Bangladeshi or Aboriginal Indian counterparts. However, they all share a remarkably similar philosophy of human health, illness and nature. Yet, it is the underlying culture that makes them different and distinct. It is misleading to say that "some 80% of the people in the developing countries have no health care system at all", as quite a few reports by respected international agencies tend to conclude. "These people depend on their traditional and indigenous health care systems and their healer, practitioners of TM and traditional birth attendants or so-called native midwives are indeed their primary health care workers" (Bannerman, 1981).

This discussion may lead to two conclusions: 1) "traditional medicines are found in all societies throughout all periods of history and predate the rise of modern scientific medicine or

allopathy at the beginning of the nineteenth century", and 2) "any culture's TM includes perceptions of health and definitions of illness, beliefs about etiology and appropriate preventive and curative practices, as well as roles for indigenous practitioners who not only treat illness but also act to restore health of individuals and a sense of well-being to the community as a whole. Traditional beliefs and practices do not develop in isolation but are part of an integrated set of social institutions within a cultural system. Consequently, they serve many functions for adherents and are often highly resistant to change even when the cultural tradition itself is no longer viable" (Mathews, 1992).

Differential Evolution: Legacy of Colonialism?

The TM of different countries and cultures vary from one another in respect of level of formal recognition. While in China or in the Indian sub-continent or in other parts of Asia, TM is fully recognized formally, in most African or South American countries such recognition is largely missing. In the Americas, particularly involving health practices and products of indigenous people, there is little acceptance of even their very existence. Consequently, indigenous knowledge in health is in danger of being lost, unless rigorous efforts are made to preserve them for future generations.

This differential evolution of TM can be traced back to the differential nature of colonialism that countries around the world had to endure. Apart from brutal incursions from imperial Japan, the Chinese belt of Asia remained largely unscathed by colonialism. India, Pakistan, Bangladesh, on the other hand, endured almost 200 years of British Raj. Before the British, the Moghuls from Central Asia came to conquer India and settled in and ruled it as rather benevolent rulers. The Moghuls not only brought a rich cultural heritage of their own, but also contributed immensely in further cultural, social and economic development of India. Under the Moghul rule, the Indian traditional medicine (Kabiraji, Ayurvedic, Siddha, etc.) received royal encouragement to flourish. The Unani system came through the Muslims who settled in India during the Moghul rule. Surprisingly, these traditional medicinal systems acquired and retained to this day, a religious orientation - unani by Muslims, while Kabiraji/Ayurvedi by Hindus. In Pakistan or Bangladesh, there is no Hakim (Unani practitioners) who is a Hindu; similarly, there are hardly any Ayurved or Kabiraj who is a Muslim. By the time the British came, these systems were quite developed, with their own schools and formularies. The religio-ethnic groups identified so strongly with one or other of those systems that the British found it difficult to ignore them, even when they were looked upon with disdain. Between 1757 and 1835, the new colonial power largely tolerated the indigenous medical systems, while laying the foundation for the Western medical system. Since 1835, officially at least, the British Raj adopted a policy of regarding Western medicine "as the hallmark of a higher civilization, as a

sign of the moral purpose and legitimacy of colonial rule in India, just as indigenous medical ideas and practices could be casually equated with ignorance and barbarism" (Arnold, 1993:57). Nevertheless, the social, political and geographical reality of India made the British adopt an attitude of benign neglect towards the indigenous medical systems. Quite often, in the interest of political expediency and in following the policy of divide-and-rule, the British Raj was almost forced to patronize one or the other TM system from time to time. Consequently, these systems continued to develop along with the newly introduced "western" system of medicine.

Encouragement and support given by post-colonial or, in case of China, post-revolutionary governments also contributed to the continued development of these traditional medical systems in the Indian sub-continent and China. As early as in 1955, a few years after the revolution, the Chinese government emphasized the need to promote traditional medicine. Driven by pragmatic reasons, the Chinese government concluded: "We must also fully realize that our ancient cultural heritage is the fruit of the genius and creative labour of the Chinese people, and that many of our contributions to culture are worth preserving and developing... If only we could enlarge the scope of our studies in Chinese medicine, rediscover the hidden treasures in our ancient science and art of healing, and make them available to the people, great achievements could result" (Chinese Medical Journal, 1955).

In India, Pakistan and Bangladesh, traditional health systems received recognition and state support only after independence. It was in 1962 that Pakistan first enacted the Unani and Ayurvedic Medical Practitioners Act to recognize and regulate these traditional health systems. In India, the Ayurvedic system gained recognition during the 1950s and gradually become a "separate profession". In the Indian subcontinent and China, traditional medical services are available as a routine part of national health services. Practitioners are trained in four or five year degree programs in separate institutions recognized and regulated by the government. Often TM association oversee the licensing process and establish and monitor professional standards. In most part of Asia, traditional medical practitioners provide most to the health care services in rural areas, where the overwhelming majority of its population live.

The African countries went through a different kind of colonialism. Labelled as the "Dark continent", it suffered the indignity of slavery, apartheid, most extreme form of repression and oppression. When slaves were not treated as humans, there was no question of providing any respect for their culture. Thus there was least or no respect for their health practices and products. On the contrary, they were repressed, often brutally. In Africa, "colonial governments and early Christian missionaries despised and therefore attempted for many year to discourage the use of

traditional medicine", remarked one of the foremost authorities on African traditional health systems, Professor G.L. Chavunduka (1986). "They attempted to suppress the traditional medical system for a number of reasons", wrote Professor Chavunduka. The colonizers "did not know that traditional medicines are effective in curing many illnesses. They believed that the traditional healer was just a rogue and a deceiver who prevented many patients, who would otherwise be treated effectively with modern drugs and surgery, from reaching government and mission hospitals." Their belief that traditional healers encourage witchcraft "which was regarded as one of the greatest hindrances and stumbling blocks in the way of Christian missionary work", also played a role in this policy of suppression. According to Professor Chavunduka there was a powerful economic reason too. "It was the desire on the part of colonial administrators to force Africans everywhere to depend entirely on medicines produced in western countries. Complete dependence on Western medicine would, of course, benefit Western countries and their pharmaceutical companies. Attempts are still being made to discredit traditional healers for this reason" (Chavunduka, 1986:30).

Unlike their Asian counterparts, the African traditional medicine, therefore, did not enjoy a natural process of evolution and development. It remained undeveloped, neglected and unrecognized. Consequently, African TM stagnated, and often, further degenerated during the long period of colonial rule.

A different type of colonialism prevailed in the Americas, Australia and New Zealand. In those places, colonialism was physical and permanent. The Aborigines were physically uprooted and annihilated. A new society was created on the ashes of the old. "When the first European arrived in the fifteenth century, Native Americans had already inhabited the continent for some thirty thousand years and numbered several million" (Dobyns, 1966). The European settlement and parallel policy of "replacement of the Natives" were so efficient that "by the early 1800's few Native Americans remained east of the Mississippi river" and "by the beginning of this century, the vanishing Americans numbered only about 250,000 in the United States" (Tyler, 1973). The indigenous population of Mexico, decreased from 2.3 million in 1650 to about one million in 1890's.

Little can be expected of such colonialism. Quite obviously, this brand of colonialism had scant respect for the culture of the vanquished. Health practices and products of the indigenous peoples of the Americas, therefore, remained unrecognized and unexplored. It not only suffered from lack of a natural growth, but also faced the spectre of total extinction along with the annihilation of its adherents. Unlike the African or the Asians, the Natives did not regain independence, but struggled with continued discrimination, segregation and socio-political isolation. Not surprisingly, Native traditional medicine is perhaps one of the most endangered cultural

heritage of modern times. Some of the indigenous knowledge is fast disappearing, and is likely to be extinct, if not preserved immediately. Preserving and further developing indigenous health practices and products must be regarded as great challenges of our time.

Resurgence of Interest

In the past decade there has been a resurgence of interest and activities in TM both in developing and developed countries. A number of factors contributed to this resurgence of interest. Perhaps, the most important factor is the nationalist spirit that engulfed the developing countries on their independence from the colonial rule. With political independence during 1950s and 1960s, most of these countries experienced a sense of cultural revival. Reviving one's own culture and taking pride in it, became a nationalist goal. Nationalist political leaders of this post-colonial era, like India's Nehru, Ghana's Nkrumah, Algeria's Ben Bella, Indonesia's Sukarno, Tanzania's Nyerere, Egypt's Nasser and Zambia's Kaunda, championed such cultural revival. Traditional medicine, along with other cultural heritage, undoubtedly benefitted from this nationalist revivalism. For the Indigenous people of the Americas, the growing demand for self-determination, land rights and self-government have produced a similar result. This cultural revival renewed the interest in traditional health practices and products among the Indigenous people. At a recent PAHO conference on indigenous people and health, many country representatives from South America and Canadian and American Indian bands, stressed the need to "rediscover and restore" the traditional healing systems practised by indigenous people of these centuries. Latin American representatives reported on the growth of activity and interest in TM in their countries. Several countries established a separate department or division of traditional medicine within their health ministry. Fifty-two different associations representing traditional health systems were represented at a recent meeting on TM in Mexico City.

More recently, hard economic realities also contributed to this renewed interest in TM. For many developing countries, the Western health care system became economically too burdensome. This system, in most cases, is based on institutions (hospitals) with a curative focus. In many developing countries, hospitals are primarily located in large urban centres while the bulk of the population live in rural villages. These hospitals, with all their modern technology, often consume more than 90% of the health budget, leaving little resources for other essential activities. In some countries, one single urban-based large hospital often account for more than 50% of the total health budget. Drugs, produced by

multinationals, and often imported from outside, are also a cost burden that few developing countries can afford. Faced with such economic pressures, many developing country governments have recently increased their support for the long-standing traditional medical practices.

In part this resurgence is also simply an acceptance of reality. In many developing countries, more than 80% of the population, mostly living in rural areas, depend almost exclusively on traditional medical practitioners for their primary health care needs. Governments could hardly continue to ignore this reality. On the other hand, the priority for these governments was to create a legal framework for standardizing and regulating diverse traditional medical practices within their borders.

International concern and pressure to conserve bio-diversity is the latest source of influence on the promotion of TM. Two other interrelated factors must also be noted: clinical tests on the efficacy of some traditional medical practices (with positive outcome) and, consequently, a rush by some multinationals to patent and market those products. These latest developments brought forth a plethora of problems and issues, but at the same time, ushered in a new era for traditional medicine.

Search for Substance

The use of natural products for medicinal purposes, according to proponents of traditional medicine, has many benefits. For example, a crude herb contains numerous chemical elements along with the "active ingredient". Since the herb is used as a whole, often in combination with a number of others, a natural mechanism is there, according to this argument, to protect the user of the drug from its potential side effects. This argument underscores two fundamental principles: that the synergistic effects of all the chemical constituents present in a particular herbal drug make traditional medicine less susceptible to side-effects and, *inter alia*, that in so far as traditional medicine is concerned, it is counter productive to look for the "active ingredient". The very desirability and practicality of applying Western scientific approach is thus questioned. Needless to say, such a line of reasoning is anathema to the Western medical tradition.

Not surprisingly, such conclusions about the efficacy of traditional health products are often questioned. Sceptics are willing to accept them only after careful scientific research. The identification and separation of the active ingredient and its clinical trial are two fundamental elements of such scientific investigation. In these days of scientific development and rigorous experimental methodology, concern for consumer safety and security, and, not least of all, fear of litigation, such insistence on scientific validity is neither unexpected nor unjustified. It is argued that traditional medical practices and products, to be

considered safe and effective, must have the same scientific basis like Western medicine. In some cases, multidisciplinary studies on pharmacologically active chemicals isolated from medicinal plants have clearly validated their traditional claims. Studies and tests are being carried out around the world - from China, Vietnam and India to Mexico, Nicaragua and Peru. A recent study on Neem (funded by IDRC) has validated numerous pharmacological qualities of this tree leaf used in different Asian and African countries for a variety of ailments. A recent article in the Times of India notes: "the government too is pouring money into research on herbal and mineral medicines. The ICICI is funding testing of the first Ayurvedic formulation for Parkinson's disease. Ayurvedic treatments for AIDS are being tested in the JJ Hospital in Bombay and the Madras General hospital. The ICMR plans to spend over Rs. 8.5 crore on a systematic search for drugs and techniques in indigenous systems. It has identified 20 diseases not amenable to satisfactory treatment by allopathy, and chosen to evaluate Ayurvedic treatments for six of them - anal fistula, bronchial asthma, viral hepatitis, urolithiasis, diabetes mellitus and filariasis - with the help of experts from both traditional and allopathic medicine, pharmacologists and biostatisticians" (Srinivasan, 1994). Such studies and, often, resultant scientific validations, have generated an intense interest on traditional medicinal plants among pharmaceutical multinationals in particular, and the Western medical practitioners and researchers in general.

In most developing countries, the use of TM has considerably increased in recent years. In spite of phenomenal progress in the area of synthetic drugs, traditional medicine is the only form of medical care available to the mass population in those countries. It is relatively cheap, and its practitioners are usually more accessible, both geographically and culturally. Most of them are ordinary folks, coming from similar socio-economic background as their clients. Referring to traditional medical practitioners in Thailand, for example, one researcher points out, "indeed, traditional health services tended to be generally less expensive and more easily accessible...; more importantly, however, they were tied in with religion and the occult. In other words, traditional healers and therapies were, and are, quite integrated with the indigenous culture and ways of life. Even today, the social roles of traditional healers are well accepted and relatively close to those of the ordinary people. For instance, the role of the traditional midwife is similar to that of a grandmother in a village and the names of traditional healers are associated with the status of a an uncle, aunt, or a grandfather. The relationships between traditional health practitioners and patients are therefore two-way interactions, that is, reciprocal relationships.... In consultations with traditional healers, patients feel free to ask questions on the ways to solve a problem or how to obtain more herbs or more remedies. Traditional healers are respected and held in high esteem in their village. Most healers are old, and they are respected for the experience that comes with age. Also, their fees

re low and the therapy they prescribe is associated with ritual and religion. The popularity of traditional health care in Thailand then is due to the way that specific concepts, techniques, and medicines of traditional healers merge with the familiar and reassuring lay knowledge and beliefs. The system of explaining illness is familiar and comprehensible" (Sermsri, 1989). In short, there is an affinity or social bond between the TM practitioners and their clients. The ultimate benefits of TM may, at least partly, be attributed to this cultural/social congruity between its practitioners and consumers.

At the same time, there is a persistent belief, yet to be fully explained, that TM has effective cure for certain complex diseases such as cancer, arthritis, asthma, diabetes, severe dermatological disorders, sexual malfunction etc. In making treatment decision people tend to be guided by some perceived relative efficacy of the modern and traditional health systems (Cavunduka, 1986). Some recent studies, conducted in China, India, Bangladesh and elsewhere, tend to support this view. For example, in treating eczema and certain chronic skin conditions, Chinese traditional herbal therapy has produced quite encouraging results. In India and Bangladesh, Ayurveds and Hakims often claim specific advantage in treating such chronic diseases as asthma, liver cirrhosis, atopic dermatitis, etc.

The fact that traditional medicine does not include such "invasive" practices as blood transfusion, surgery, injections, etc. may have also contributed to their appeal. On the one hand, this reduces the risk of infections (such as AIDS through contaminated blood transfusion or from one partner to the other, i.e., from the doctor to the patient or vice-versa); and on the other, dependence on technology, and hence, the cost. The cost factor alone, in the context of ever-increasing cost of the ever-changing technology based western medical system, must be regarded as an important incentive for developing countries to opt for traditional medicine. It should be pointed out that, these characteristics of the traditional health system (avoidance of "invasive" practices and nonuse of "modern" technology), may also explain, at least partially, its historical lack of appeal to the Western educated, primarily urban-based, population in developing countries. Vaccines, surgery, x-rays, ultrasound, etc. have their own aura of scientific authenticity which traditional medicine clearly lacks.

It would be misleading to say that the appeal or prospect of traditional medicine is limited to developing countries. Obviously, China, India, Pakistan, Bangladesh, Sri Lanka, Vietnam, Indonesia, Malaysia, Sudan, Egypt, Ghana, Nigeria, the Philippines, Mexico and other countries have made great advances in traditional medicine. In China traditional medicine is fully integrated with the modern medical system. In India, as Srinivasan (1994) points out, there are "more than 100 Ayurvedic colleges, 26 Unani colleges and two

Siddha colleges", and they "turn out nearly 9,000 graduates every year - pretty close to the 10,000 churned out by the allopathic mill". In Bangladesh, there are 10 Unani Diploma colleges and 5 Ayurvedic Diploma colleges. There is also a graduate Unani college in the capital of Bangladesh that has a five-year study curriculum and is accredited by the University of Dhaka.

It is interesting to note that herbalism has slowly emerged as an alternative form of medicine in much of the developed world too. A recent article published in the United States, claimed that "alternative medical treatment is finally coming out of the medical closet and into the mainstream. The recent opening of an Office of Alternative Medicine within the National Institutes of Health has added to the interest in alternative healing sparked by the Bill Moyers PBS series Healing and Mind" (Ullman, 1993). The article also quotes a recent survey, published in the New England Journal of Medicine (January 28, 1993), that 34% of Americans used some type of alternative therapy in 1990, with an estimated cost of \$13.7 billion, 75% of which was paid by the users themselves. The establishment of the Traditional Medicine Program at the World Health Organization in 1978 should be regarded as an important milestone in this resurgence of interest in traditional medicine. And in 1992 the National Institutes of Health, the pioneer health research facility in the United States, established an Office of Alternative Medicine. Needless to say, the term "Traditional" or "Alternative" medicine is not a foreign term any more with international agencies like the World Health Organization or the World Bank or with multinational drug companies.

Challenges and Prospects

Despite all these renewed interest and real progress, TM is yet to be accorded its proper role with the overall health care system in developing countries. The case of Bangladesh may be used as an example in this respect. It is one of the poorest countries of the world, with a per capita GDP of only US\$ 210. With a population of 113.7 million crammed in a meagre 56,000 sq. miles of land mass, it has one of the highest population density (789 per sq km). Poverty, illiteracy, malnutrition and ill health have created a vicious cycle in Bangladesh. According to some estimates, the life expectancy at birth is only 52.5 years, infant mortality rate is 108 per 1000, maternal mortality is as high as 113. Only about 35% of the population has access to modern health care resources (primarily consisting of hospitals and public physicians). The government of Bangladesh spends, or able to spend, only about Tk 20 (US 50 cents) per capita for health. There are one hospital bed for every 3,300 people, and the physician-population ratio is 1:5,338.

More than 80% of the population in Bangladesh use traditional medicine. Traditional practitioners are readily available in most villages and towns. It is obvious that Bangladesh cannot achieve the lofty goal of "Health for All by the Year 2000", without

vigorous participation of traditional medical practitioners in the health care system. Some steps were taken to promote greater cooperation between these two systems and to give its proper role to TM. The Unani and Ayurvedic Board was created in the 1960s to bring the Hakims and Kaviraj within the fold of the "formal" health care system. Nevertheless, the gap persists. In the national health care plans, TM receives little recognition. Effective collaboration of the "modern" and the "traditional" still seems to be an elusive goal. Other countries, particularly those in Africa (Last and Chavunduka, 1986), and the indigenous people of Americas (Young, ed., 1988), face similar challenges.

Policy Options and Issues

Although medical pluralism is a fact in almost every society, the relationship between the traditional and modern systems of health may take one of the following four forms (1):

a) Intolerant Medical Orthodoxy: The western system has a monopoly on health care, and traditional healing systems are either made explicitly illegal or institutionally repressed. Kenya and Ivory Coast are the countries in Anglophone and Francophone Africa that made traditional healing systems illegal. Aboriginal healing systems, on the other hand, are suppressed and ignored.

b) Tolerant Medical Orthodoxy: TM is informally recognized and tolerated. This policy option applies "the liberal principle of 'laissez-faire' in the domain of health. In practice, this means that the State is officially concerned only with the modern medical sector, leaving the other to develop on its own without state control. However, a modern system cannot permit itself to ignore an activity which is so basic to the life of its citizens...Dealing with this medicine in the negative, the state cannot include it in the planning of health services, and thus deprives the state of an important resources which could help it to meet the health needs of the population" (Kikhela, et al., 1979). In this model, alternative therapies or techniques are often used by the orthodox medical practitioners with a view to become more culturally relevant to the client population. The multicultural health care movement in Canada is also a manifestation of such a tolerant approach.

c) Parallel Development of Multiple health Systems: The alternative healing practices are not only recognized legally, but also regulated by the state. There is increased professionalization of these multiple systems resulting in their co-existence. However, parallel development may not translate into active collaboration between the custodians of the traditional systems and the western medical orthodoxy. Countries in the Indian subcontinent and South East Asia may be the best examples of such parallel development.

d) The policy of Integration: This policy aims at combining the theory and practice of different health systems and creating a new,

better, and comprehensive one. China is perhaps the best example of this policy. However, since philosophical underpinnings of the traditional and western medical systems are quite different and often contradictory, real integration is extremely difficult, if not impossible. At the same time, a policy to combine two or more systems in which there is power disequilibrium among the partners can not lead to integration in the true sense of the term. In such a scenario, one may end up dominating the other. In such cases, perhaps establishing equity is more important than integration.

e) Active Collaboration between Fully Recognized Health Systems: It presupposes equity, mutual respect and understanding among the partners. "This option envisages the establishment of structures permitting the integration of the two systems through experiments in cooperation; at the same time, such an option follows from more basic studies on the characteristics and originality of the medicine of the healers. This encounter of two medicines aims first of all at the basic establishment of a health structure which takes of each of them into account; it tends also more basically, to gradually move the centre of gravity of the entire medical systems" (Kikhela, et al., 1979)). It is an emerging trend that needs to be promoted and enhanced. Once fully developed, this will establish medical pluralism in the real sense of term.

In fact, there are structural, social, and political barriers in achieving true medical pluralism. Current renewed interest in traditional medicine provides an opportunity to further explore these problems and promote pluralism. This contemporary focus on TM has also brought forward other related issues. Unfortunately, national and international policy has not kept abreast of these changes by developing appropriate strategies for addressing many issues involved in the support for and provision of traditional health services. These issues may be grouped under four broad categories:

- 1) preserving and promoting indigenous knowledge, practices and products,
- 2) collaboration/cooperation of traditional and modern systems of health care,
- 3) production/research and development of TM with full attention to all the complex issues of intellectual property rights, patent rights, the role of multinationals, etc.; and
- 4) national and international policies regarding traditional medicine and bio-diversity, and environmentally and culturally sustainable and equitable development.

These issues are complex and critical. Most of them transcend national boundaries and cannot be resolved without international efforts and agreements. It is time that we embark on a serious dialogue, both within and among nations, to address these fundamental issues for human health in all its dimensions. Social scientists in general and, sociologists in particular, must play a

central role in this dialogue and in the quest for better understanding and more meaningful collaboration between the traditional and modern health systems.

Note

- (1) These are adapted from an unpublished paper by Dr. David Young, Department of Anthropology, University of Alberta, Edmonton, Canada. (The paper is included here).

References

- Aboriginal Nurses Association of Canada, 1993. "Traditional Medicine and Primary Health Care Among Canadian Aboriginal People".
- Arnold, David, 1993. *Colonizing the Body; State Medicine and Epidemic Disease in Nineteenth-Century India*; Berkeley, University of California Press.
- Bannerman, R.H. 1981. "Discussion on Yoruba Traditional Healers of Nigeria". *Social Science and Medicine*, Vol. 15B.
- Bibeau, Gilles, 1985. "From China to Africa: the Same Impossible Synthesis Between Traditional and Western Medicines". *Social Science and Medicine*, Vol. 21, No. 8.
- Chavunduka, G.L. 1986. "The Organization of Traditional Medicine in Zimbabwe", in Murray Last and G.L. Chavunduka eds., *The Professionalization of African Medicine*. Manchester, Manchester University Press.
- Chinese Medical Journal, 73, September, 1955. "Why Our western-trained Doctors Should Learn Traditional Chinese Medicine"?
- Dobyns H.F. 1966. "An Appraisal of Techniques with a New Hemispheric Estimate". *Current Anthropology*, Vol. 7, No. 4.
- Kikhela, Nguete, et al. 1979. "Steps toward a New System of Public Health in Zaire". *African Therapeutic Systems*, Crossroads Press.
- Kirkland, James; Mathews, H.F. et al., eds. 1992. "Herbal and Magical Medicine". London, Duke University Press.
- Last, M and G.L. Chavunduka, eds. 1986. *The Professionalization of African Medicine*. Manchester, Manchester University Press.
- Mallock L. 19---. "Indian Medicine, Indian Health - Study between Red and White Medicine". *Canadian Women Studies*, 10 (2&3).
- Sermsri, Santhat, 1989. "Utilization of Traditional and Modern Health Care Services in Thailand", in Stella R. Quah ed., *The*

Triumph of Practicality: Tradition and Modernity in Health Care Utilization in Selected Asian Countries; Institute of Southeast Asian Studies.

Srinivasan, Sandhya. 1994: "Old Medicine, New Bottles", The Times of India, August 7.

Tyler S.L. 1973. "A History of Indian Policy". Washington D.C., United States Department of the Interior, Bureau of Indian Affairs.

Ullman, Dana. 1993. "Renegade Remedies"? Utne Reader, November/December.

World Health Organization, 1977. "Report on the WHO Meeting on the Promotion and Development of Traditional Medicine". Geneva.

Young, David. E., ed. 1988. "Health Care Issues in the Canadian North". University of Alberta, Edmonton, Canada.

Young, David. E, et al. 1989. "Cry of the Eagle: Encounters with a Cree Healer". Toronto, University Press.

HEALTH SYSTEMS - TRADITIONAL/WESTERN DICHOTOMY

Traditional Health Systems And The Conventional System in Uganda

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Introduction

Historically, traditional health system and the use of traditional plant materials may be deemed to have started soon after the appearance of mankind. Biblical writings are rich in reference to the use of various medicinal plants, for example opium and papyrus. The thrust behind the search for herbal or plant substances could be the concept that these substances could improve or maintain the existing functional activities of an organism, chiefly man and his domestic animals. All societies at one time or another require medicine-man for physical and psychological needs. The herbal-medicine-man have been the source of information of traditional healing systems, which have been passed on from generation to generation as folklore.

Before the advent of the first European to Uganda, in the late eighteenth century, the people relied on traditional or native medicine for their health problems. At that time, according to oral history, traditional healer and herbalists were the only medical practitioners in Uganda. It is said that the people of Uganda believed that one would be ill as a result of either of a) the evil spirit of a witch-doctor, b) the spirit(s) of one's ancestors, c) an alien and patronal spirit, or d) the aggrieved spirits. To discover what was accountable for the illness, misfortune or death, the relatives consulted traditional healers. The relatives of the patient would narrate to the traditional healer the patient's life style in order to identify the cause of illness and to select the herbal medicine to be administered.

With the introduction of Christianity, in 1877, Western education and medicine came into being. This brought many changes in the lives of the people. Christian instructions and education made Ugandans abhor and abandon inter-alia the treatment of the sick by traditional methods. Traditional medicine enabled the people to guard against diseases to alleviate suffering from illness. Christian education and western medical science created a state of confusion in the minds of Ugandans. The concept of God the missionaries were preaching, was not the kind of God the Ugandan believed. Although many people accepted the scientific basis of some diseases, others still retained a belief in gods and spirits being responsible for many misfortunes and ill health. Even today ill people shuttle between traditional practitioners and western health systems.

The colonial administration and Christian teaching did not recognize the importance of TM and its power to cure diseases. Campaigns were mounted both in churches and schools to discredit the work of traditional healers. The missionaries advised their converts not to use TM as they regarded them primitive, risky and devilish.

The Status of Traditional Medicine

Currently, there is a resurgence of interest in almost all parts of Uganda, not as a natural and lower cost alternative to western drugs but as an effective health care system which westerners seem to accept. For instance, a Roman Catholic Priest, Rev. Father Anatoli Waswa of a religious organization has got involved in the administration of the medicine which traditional practitioners use and believe that these medicines possess supernatural powers. He has clinics in many districts of the country, and receive huge patients. Traditional healers/herbalists and their medicines, largely in the form of herbal powders, liquids, dry barks of trees, raw and dry roots are now available and widely used in many places of the country. In Uganda, and indeed in many other countries of Africa, traditional healers were labelled "witch-doctors". But now there appears to be a growing realization, not only in Uganda but the world all over, that traditional and western medicines can work side by side. The World Health Organization in its 1990-1993 work program states that it is necessary to put TM on scientific basis. According to a local newspaper "The People", this is occurring in several countries. Many countries are trying to regulate traditional healers. In Zimbabwe for example, the Minister of Health presides over both modern and traditional sectors. While there are 11,000 workers in the western health systems, National Association of Traditional Healers, Zimbabwe, has 24,000 qualified members.

In contrast, Uganda has continued to have a disdain of traditional healers. Western trained doctors are under the Ministry of Health while traditional healers are under the Ministry of Women in Development, Culture and Youth. The Government of Uganda, however, has expressed interest in recognizing traditional health systems and medicine. To this effect, the Natural Chemotherapeutics Research Laboratory, under the Ministry of Health, was set up chiefly to address the development and harnessing Uganda's natural products with the therapeutic potentials so that these could be made available for use in national health services. The laboratory has undertaken an ethnomedico-botanical survey aiming at facilitating the laboratory to interact with traditional healers to gather information, and in turn will form a basis for cooperation and for conducting joint research.

The survey team has recorded a total of 180 recipes or preparations for the treatment of various diseases. These preparations are expected to treat malaria, cough, whooping cough, tuberculosis, asthma, abdominal pain, peptic ulcers, difficult labour, epilepsy, clearing of fallopian tubes etc. Many traditional healers practices TM as a cultural heritage. Spirit seems to occupy an important place in the minds of both healers and patients.

Recently, the National Traditional Healers and Herbalists Association has attempted to establish a hospital at Mengo - Kampala, where traditional health care will be offered. This proposed hospital (with 20 beds) will operate with facilities worth of US\$ 8.9 million. A research, jointly done by Mulago hospital, the AIDS support organization and a team of traditional healers, revealed that TM in some cases provides better results in the treatment of some symptoms of AIDS such as, herpes zoster, chronic diarrhoea, and weight loss having no significant side-effects.

The Conventional Health System in Uganda

Medical services in Uganda have undergone gradual development. Dr. Albert Cook, British missionary, set up the first clinic at Mengo in 1897. He was the first in the country to dispense modern medical services to Africans and the first to train African personnel in medical services. He also laid the foundation of the present Makerere Medical School. He also open Mulago Hospital, which later became the national teaching and referral hospital and served as a centre for investigation and treatment of venereal diseases. In 1924, the medical school for the training of native African Assistant Medical Officers began, from where the students obtained diplomas in medicine. In 1929 Dr. Rurfum, a bacteriologist started the school of laboratory technicians at Wandegeya, near Mulago Hospital. Later this became the school of Medical Laboratory Technology at Mulago which offers Makerere University diploma. In 1956, a Vector Control Division was established in the department of health, Makerere University. Other paramedical schools were established after independence as further needs emerged.

By the 1960's Uganda was considered to have one of the best conventional health systems in Africa. At that time, drugs were available free of costs, and there was no shortage of drugs at the government hospitals. During the reign of Amin, 1971-1979, all health facilities were critically affected. A large number of doctors both Ugandans and non-Ugandans had left the country. By 1974, the number of doctors in the country dropped from 978 to 574 and the number of pharmacists from 116 to 15 (Scheyer and Dunlop 1985:34). Supplies of drugs in government hospitals were drastically disrupted and patients' visits to government health facilities plummeted. It is assumed that many people resorted to traditional healers and to native medicines as hospital services became unaffordable. "A patients had to bribe hospital authorities

for treatments and to get drugs. Out of despair, people resorted to private practitioners or unlicensed pharmacists to save time and money (Kironde, 1985:65).

Studies done by the Uganda Red Cross (Kinuka et al., 1985; Odurken, 1988) indicated that people purchase drugs from a variety of sources at high prices and that misuse of drugs is widespread.

Public Policy

The Government of Uganda is currently in the process of developing a health policy and has emphasized primary health care. Notable progress has been made to increase awareness of mothers on immunization through education and community mobilization. This has resulted in about 80% infant immunization coverage against the six killer diseases (malaria, whooping cough, diarrhoea, tuberculosis, measles and diphtheria) and control of diarrhoea among children.

The health policy on TM has recently been recommended by a health review commission. The main recommendations included were:

- 1) The Ministry of Health should work closely with the traditional practitioners in order to achieve the objectives of health for all by the year 2000. They should be members of the health team in the community and be welcome to participate in primary health care;
- 2) Traditional healers should be encouraged to form a National Association through which the Ministry of Health should regulate and supervise their practices;
- 3) The Ministry of Health should arrange appropriate training programs for traditional practitioners such as Birth Attendants and Bone-setters;
- 4) Referral of patients between medical doctors and traditional healers should be established;
- 5) The Natural Chemotherapeutics Research Laboratory should be strengthened and carry out applied research on TM;
- 6) Land and money should be made available to grow medicinal plants and to preserve them;
- 7) Rewards/awards should be given to the traditional healer whose collection of medicinal plants is found to be of therapeutic value.

Conclusion

As observed in the health review commission's recommendations, submitted to the Government of Uganda, there is hope that a new relationship between the conventional medical professionals and traditional healers may be established. With cooperation of the two professionals, the services of traditional healers may be tapped, improved and utilized without prejudice. Unlike medical doctors, most traditional healers live with and share common customs and traditions of the people to be in a better position to evaluate social and cultural attitudes of the members of community, and can provide primary health care services.

References

1. "The people Newspaper". Vol.no.vii, No.3, Week ending 28th June, 1993.
2. "The New Vision". Newspaper, 4th February, 1994.
3. Scheyer and Dunlop. 1985. "Health Services in Uganda".
4. Kiwanuka, E et al., 1985. "Essential Drugs Management Programs, Base-line survey for Public Education Program". Red Cross Society.
5. Kironde, E. 1985. "A Village Perspective of Health Services in Buganda"., in Lodge and Wiebe.
6. Dodge, C.P and P.D.Wiebe, ed., 1985. "Crisis in Uganda: The Breakdown of Health Services". Oxford Pergamon Press.

**Developmental Therapeutics Program at the
Division of Cancer Treatment: A Short Description**

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Natural Products Acquisition Program

The Natural Products Branch supervises contracts in the following areas:

- * Collection of plant samples from tropical and subtropical regions worldwide;
- * Collection of marine macro-organisms (mainly invertebrates and plants) from the Indo Pacific region;
- * Cultivation and extraction of unusual microbes (cyanobacteria, fungi, marine anaerobic bacteria, marine protist).

Dried plant samples and frozen marine macro-organisms are delivered to the Natural Products Repository (NPR) at the Frederick Cancer Research and Development Centre (FCRDC) where they are stored at -20 C. Aqueous and organic solvent extracts are made by the Extraction and Grinding Laboratory at FCRDC, and are stored at -20 C at NPR. Microbial extracts are also stored at the NPR, and microbial culture samples are cryopreserved and stored at -70 C at the NPR.

Extracts are tested in vitro for antitumor activity against panels of human cancer cell lines representing major disease-types, such as breast, colon, lung, CNS, melanoma, etc. The screen currently comprises 60 cell lines. Anti-HIV testing is performed in vitro against a single human lymphoblastoid cell line infected with the AIDS virus.

The NPR extraction and screening laboratories are operated in NCI facilities at FCRDC by a contractor, currently Program Resources Inc. (PRI). Active extracts are fractionated by NCI and PRI chemists using bioassay-guided fractionation, and selected active agents are further developed towards clinic trials in collaboration with source country scientists.

Collection Contracts and Collaborations

The following measures are applied to all source programs:

- * Wherever possible, contractors collaborate with source country organizations and scientists in carrying out collections;

- * Voucher specimens of every organism collected in a particular country are deposited in to the national herbarium or repository in that country;
- * Test results are provided to contractors for distribution to scientists in the source countries. Countries only receive results for those organisms collected within their borders, and scientists are requested to keep data on active organisms confidential until NCI has had the opportunity to pursue isolation studies and determine whether agents are patentable;
- * Senior scientists from source countries may be invited to FCRDC and contractors facilities for short periods (about two weeks) to discuss the NCI acquisition and drug discovery programs. All expenses are covered by NCI or PRI.
- * Qualified scientists from collaborating organizations are invited to visit FCRDC for 6-12 months to participate in isolation and/or screening studies with NCI and PRI scientists. All expenses are covered by NCI or PRI;
- * The development of selected active agents will be carried out in collaboration with source country scientists according to agreements based on the NCI letter of collection.

In addition to regular contracts, the following collaborative studies have been established:

- * Kunming Institute of Botany: Study of Chinese medicinal plants.
- * Central Drug Research Institute, Lucknow: Study of Indian medicinal plants.
- * Natural Products Research Institute, Seoul National University: Study of Korean medicinal plants.
- * Genetic Engineering Research Institute, Tae Ton, Korea: Studies with bacterial and fungi.
- * HEJ Research Institute of Chemistry, University of Karachi: Study of Pakistani plants.
- * Smithsonian Institute (Dr. Ernani Menez): collection of Philippines marine organisms (mainly algae) in collaboration with Siliman University.

- * Brigham Young University (Dr. Paul Cox): Study of Polynesian medicinal plants.
- * Cancer Research Centre, Moscow: Study of Russian medicinal plants.
- * Tel Aviv University (Dr. Yoel Kashman): Study of Red Sea marine invertebrates.
- * Food and Crops Research Group, University of Otago, New Zealand: Study of New Zealand plants.

Plant Collections

Three five-year contracts were awarded in September, 1986, at a total cost of approximately \$2.7 million. These contracts were renewed and awarded to the incumbents for a further five years starting in September, 1991, at a total cost of approximately \$3.8 million. The contractors are:

- * Tropical and Subtropical Africa and Madagascar - Contractor: Missouri Botanical Garden.
- * Central and South America - Contractor: New York Botanical Garden.
- * Southeast Asia - Contractor: University of Illinois at Chicago. Subcontractors: Arnold Arboretum, Harvard University, Bishop Museum, Honolulu.

Collections are being carried out in the following countries:

<u>Country</u>	<u>Collaborating Organization</u>
<u>Africa</u>	
Cameroon	University of Yaounde
Gabon	Herbier National, Centre National de la Recherche Scientifique et Technologique, Libreville
Ghana	University of Ghana, Legon
Madagascar	Centre National de Recherches Pharmaceutiques, Antananarivo
Tanzania	Department of Botany and Institute of Traditional Medicine, University of Dar Es Salaam
Zimbabwe	Zimbabwe National Traditional Healers Association and the University of

Zimbabwe

Central and South America

Belize	Department of Forestry, Belmopan, Belize Association of Traditional Healers; Chel Tropical Research Centre, San Ignacio
Bolivia	National Herbarium, La Paz; Museo de Historia Natural, Santa Cruz
Columbia	University de Antioquia, Medellin; Universidad del Valle, Cali; Jardin Botanico "Juan Marin Céspedes", Tulua
Dominican Republic	Herbario "Dr. Rafael N. Moscoso", Santo Domingo
Ecuador	Fundacion Natura; Pontificia Universidad Catolica del Ecuador, Quito, AWA Federation
Guatemala	Universidad de San Carlos, Guatemala City
Honduras	Fundacion Hondurena de Investigaciones Agricolas
Martinique	Galerie de Botanique, Fort-de-France
Paraguay	Facultad de Ciencias Quimicas, Universidad de Asuncion
Peru	Instituto de Investigaciones de la Amazonia Peruana

Southeast Asia

Indonesia	Herbarium Bogoriense; Indonesian Institute of Sciences
Malaysia	Department of Forests, Sarawak; Institute for Advanced Studies, University of Malaysia, Kuala Lumpur; Forest Research Institute of Malaysias, Kuala Lumpur
Nepal	Department of forestry and Plant Research, Kathmandu
Papua New Guinea	Forest Research Institute, Lae; Lae Herbarium
Philippines	Philippines National Museum, Manila

Taiwan	Chinese Cultural University, Taiwan Forestry Research Institute, Taiwan National University (all in Taipei); Taichung Medical College; Hengchun Tropical Botanical Garden
Thailand	Royal Forest Herbarium, Bangkok

Marine Macro-organism Collections

A contract operation has been in effect since September, 1986. Up to January, 1992, various organizations had participated in this operation, including the Australian Institute of Marine Science (AIMS) and Harbor Branch Oceanographic Institute (HBOI) in Florida. A new contract for another five-year period was awarded to Coral Reef Foundation on March 1, 1992, at a total cost of approximately \$2.9 million. Countries participating in the collections are:

Country	Collaborating Organization
Australia	Australian Institute of Marine Science, Townsville, Queensland
New Zealand	University of Canterbury, Christchurch; National Institute of Water and Atmospheric research Ltd.
Papua New Guinea	Department of the Environment and Conservation, Boroko
Philippines	Silliman University Marine Laboratory, Dumaguete; National Museum of the Philippines, Manila
Thailand	Institute of Marine Science, Bangsaen.

Traditional Health Care and Public Policy: Recent Trend

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Introduction

Long relegated to marginal status in health planning in developing countries, traditional medicine or more appropriately, traditional systems of health care have undergone a major process of revival in the past decade or more. An emerging international policy climate has seen new recognition given to the efficacy, affordability and sustainability of many of these local traditions of health and medicine.

In this article some recent trends will be discussed and illustrated with experiences from countries and communities in Africa, the Americas and Asia. We will consider economic, cultural, environmental and other factors that have led to the resurgence of interest in traditional systems of health. We will also address some popular myths about traditional medicine concerning its efficacy and safety, its use in emergency care, the scientific basis for its effects and its role in biodiversity conservation.

In the concluding section, key policy issues will be identified for the future incorporation of traditional medical knowledge and approaches in the provision of cost-effective and locally available health care.

Background

The term "Traditional Medicine" or "Traditional System of Health Care", refers to the long-standing indigenous systems of health care found in developing countries and among indigenous populations. The paradigms of these traditional medical systems view humanity as being intimately linked with the wider dimensions of nature.

The World Health Organization has referred to these systems as "holistic" - "i.e. that of viewing man in his totality within a wide ecological spectrum, and of emphasizing the view that ill health of disease is brought about by an imbalance, or disequilibrium, of man in his total ecological system and not only by the causative agent and pathogenic evolution". A WHO rephrase described TM as "one of the surest means to achieve total health care coverage of the world population, using acceptable, safe, and economically feasible methods" (Stephan, 1983).

The treatment strategies used in traditional systems of health include the use of herbal medicines, mind/body approaches such as meditation, and physical therapies including massage, acupuncture and exercise programs. These are low-cost, locally available treatments which, according to WHO are utilized as the source of primary health care by 80% of the world's population.

Organizational Relationship Between Modern and Traditional Medicine

In colonial times, traditional medical systems were frequently outlawed by authorities. In post-colonial times the attitudes of western-trained medical practitioners and health officials have maintained the marginal status of traditional health care providers, despite the role that these practitioners play in providing basic health care to the rural majority of developing countries and within indigenous communities. There are four main ways TM has interfaced with modern medicine:

- 1) **MONOPOLISTIC** - modern medical doctors have the sole right to practice medicine.
- 2) **TOLERANT** - traditional medical practitioners are not officially recognized but are free to practice on condition that they do not claim to be registered medical doctors.
- 3) **PARALLEL** - practitioners of both modern and traditional systems are officially recognized. They serve their patients through equal but separate systems (e.g. India).
- 4) **INTEGRATED** - modern and traditional merged in medical education and jointly practised within a unique service (e.g. China, Vietnam).

An interesting point on the incorporation of TM into western medical care is the case of Japan, where physicians have been permitted to both prescribe and dispense medications. As a result, over two-thirds of all Japanese physicians prescribe herbal medication at times, some with great frequency (Kikkei Med. Journal, 1981)

Factors Influencing Policy Development

In an increasing number of developing countries, policy interest in traditional approaches to health care has led to a resurgence of interest, investment and program development in this field. Reasons for this new interest include:

1. Economic factors

There is a common saying in Vietnamese peasant communities that TM costs one chicken, modern medicine costs one cow and modern

hospital treatment costs cows. In many countries, rural people may need to travel for a day or more to reach a modern medical clinic or pharmacy. This results in lost wages and the cost of transport can often exceed the cost of the medicines themselves. Whatever the official view of traditional health care systems, typically more than 80% of health budgets are directed to services that reach approximately 20% of the population. Of this, 30% of the total health budget is spent on the national pharmaceutical bill (Bannerman et al., 1983).

Some countries, recognizing that they cannot afford universal western style health care, have provided increased support for their long-standing traditional medical systems. In Thailand, for example, the Ministry of Health promotes the use of 66 traditional medicinal plants in primary health care. The Health Ministry reports that this is based on scientific evidence of the efficacy of these plants as well as on traditional patterns of utilization. The Fourth Public Health Development Plan of Thailand (1977-1981) stated the country's general policy to promote the use of traditionally-utilized medicinal plants in primary health care. The Seventh Plan (1992-1996) promotes the integration of traditional Thai medicine into community health care and gives priority to research into medicinal plants. The Ministry of Public Health also promotes the use of medicinal plants in state-run hospitals and health service centres (Koysooko et al., 1993). In Korea, between 15% and 20% of the national health budget is directed to traditional medical services. Government reports indicate that TM is favoured equally by all levels of society (Choe, 1993). Traditional medical practitioners in Korea typically earn more than modern medical practitioners due to the popularity of TM. Health insurance coverage is available for oriental medical treatments.

2. Cultural Factors

Cultural factors play a significant role in the continued reliance on TM. Often villagers will seek symptomatic relief from modern medicine, while turning to TM for treatment of what may be perceived as the "true cause of the condition" (Kleinman, 1980). Traditional medical knowledge is typically coded into household cooking practices, home remedies and health prevention and health maintenance beliefs and routines. Treatment is frequently a family based process, and the advice of family members or other important members of a community has a major influence on health behaviour, including the type of treatment that is sought (Jantzen, 1978).

Revival of traditions in different parts of the world, often following decolonization or increased self-determination for indigenous groups, has led some countries to re-evaluate and promote their traditional medical systems. At a recent Pan American Health Organization conference on indigenous people and health, many country representatives from South America reported on the growth of activity and interest in traditional medicine in their

countries. Several countries have departments or divisions of TM within the health ministry. Mexico has a Government Institution of Traditional Medicine - 52 different TM associations were represented at a recent meeting of the institute in Mexico City.

In northern Canada, The Inuit Women's Association has developed a program to revitalize traditional birth practices. Knowledge and procedures have been gathered and recorded from elders. Through the use of video recordings, younger midwives are now trained in the use of traditional methods.

3. National Crisis

In addition to economic and cultural factors, national crises have served to spur governments to evaluate their indigenous medical traditions as a means of providing affordable and available health care for their citizens. Two common crises have been influential. They are: war and epidemics.

1) **War:** During the recent war in Nicaragua, there was an acute shortage of pharmaceutical supplies. In 1985, out of necessity, the country turned to its herbal traditions as a means of assisting with the country's medical needs. A department was established within the health ministry to develop "popular and traditional medicine as a strategy in the search for a self-determined response to a difficult economic, military and political situation (Sotomayor, 1992).

The new department of TM initiated a program of ethnobotanical research in which more than 20,000 people around the country were interviewed regarding their use of traditional and popular remedies, the methods of preparing these and the sources from which plant ingredients came. This took place in the midst of war. Prior to this undertaking, nurses and health workers in rural areas frequently manned outposts where no medical supplies were available. In most instances, they were living surrounded by medicinal herbs of which they knew nothing.

Extensive survey was undertaken and a national toxicology program was begun. Over a period of six to seven years, pharmacognostic studies were done to determine the chemistry and medicinal properties of commonly used plants. As a result of this effort, inexpensive medicines were produced locally and sustainability in rural areas to treat a wide range of conditions, including respiratory ailments, skin problems, nervous disorders, diarrhoea, diabetes and arrange of other conditions.

In Vietnam, arising from the war of independence from France, an official policy was articulated in 1954 by the President Ho Chi Minh, which asserted the importance of preserving and developing TM

as a basic component of health care throughout the country since modern medicine was not affordable for a significant proportion of the population of Vietnam.

A national heritage program in TM was established to ensure that the medical knowledge of experienced and older practitioners was gathered, recorded and passed on to future generations through formal training programs in TM. Simultaneously, a policy was developed to promote the modernization of TM and to incorporate it into health service provision on an integrated basis with modern medicine. This policy was expanded and strengthened during the 1960's and 1970's in the war between the North and South. Emergency medical strategies that were generated included the development of a traditional medical program for the treatment of burns.

After several decades of pharmacognostic and toxicological research, the National Institute of Materia Medica in Hanoi has developed a list of 1869 plants with known safety and efficacy in the treatment of common medical conditions in Vietnam (Institute of Materi Medica, 1990).

11) Epidemics: In Africa, governments facing huge drug bills for the growing AIDS crisis are looking to their indigenous medical traditions and medicinal plants to identify inexpensive and effective treatments for at least alleviating the suffering of AIDS victims. The AIDS Support Organization (TASO) of Uganda has been active in generating research into the role of traditional medical practitioners in treating people with AIDS. This has been linked to a biodiversity project which includes the evaluation and medical potential of medicinal plants in dense forest areas. Funding for the TM component has come from the Rockefeller Foundation, the WHO and the World Bank, indicating the emergence of a new group of actors in research into TM. The linkage of TM to biodiversity conservation and economic factors - affordable health care, to TM.

The outbreak of chloroquine-resistant malaria has also been a spur for a number of countries to re-examine traditional methods of treating malaria. With approximately 30% of the health budgets of developing countries being directed to the cost of drugs produced in industrialized countries (Bannerman, 1983), the prospect of dealing with epidemics such as AIDS, and the new rise in the incidence of malaria and tuberculosis, is forcing many governments to look to their indigenous systems of medicine and medicinal flora for low cost solutions.

International Pressure to Conserve Biodiversity

It is a feature of traditional health systems that they intersect with areas of the national economy than simply health. Environmental factors such as land degradation through erosion and/or development has contributed to the loss of natural habitats.

Loss of natural habitats can affect the availability of medicinal plants and hence have an impact on local health standards.

In countries where this has occurred, herb gatherers have to walk increasingly long distances to find herbs that previously grew nearby (Balick, 1993). Over time medicinal plant resources become depleted in those areas and the distance and time involved in gathering herbs increases. This is compounded in herbs where demand is great and cultivation minimal. All of this contributes to increasing the cost, the availability and sustainability of naturally occurring sources of medicines.

Domestic finances as well as national economic development can be linked to the cultivation and use of traditional medicines. For instance, cultivation of wild harvesting of medicinal plants can bring in an additional source of family income. It also saves expenditure on other medicines. However, over harvesting constitutes a threat to biodiversity. Over harvesting of medicinal plants, as is the use in China, where approximately 80% of the raw materials for TM come from wild sources, raises the need for new policies which integrate health and environment and economic perspectives. Investments are needed for the development of appropriate cultivation and harvesting strategies which will meet the demand for low-cost and locally available medicines as well as for the conservation of diverse biological resources.

Most developing countries lack information and resources to apply contemporary methods for conducting systematic survey and inventory studies of flora and fauna. This has meant that it has not been possible to systematically track resource depletion in medicinal plants or in animal species used in traditional formulae.

In recent years, there has been a growth of interest in TM from the international pharmaceutical industry as well as from the natural product industry in Europe and North America. TM is viewed by the pharmaceutical industry as a source of "qualified leads" in the identification of bio-active agents which can be synthetically modeled for the production of patented modern drugs. The National Institute of Health in the United States has initiated two drug discovery projects along these lines - one in 1992 from the National Cancer Institute, the National Heart Lung and Blood Institute and the National Institute of Mental Health, and the other in 1993 from the National Institute of Allergies and Infectious Diseases.

The NCI Biodiversity Project was developed by a consortium of U.S. Government agencies involving, in addition to NCI, the National Science Foundation and the United States Agency for International Development. The agreement, which aimed to set up partnerships between pharmaceutical companies and governments in developing countries, has three main goals: 1) Drug discovery, 2) Economic development in developing countries through the

establishment of economic programs related to the pharmaceutical production process, and 3) Conservation of diverse biological resources in developing countries.

These projects promote a drug discovery model which uses the skills of custodians of traditional knowledge in identifying medicinal plants. The other source of interest in TM is the natural products industry in Europe and the United States. In Europe, where there is a large industry in "phytomedicines", extracts of medicinal plants, sold in purified form for treating and preventing a wide range of health conditions, there is a significant demand for medicinal plants from other countries.

These trends have led to a situation where TM is viewed as a source for the production of other medicines rather than as having intrinsic validity and value in its own right. There is certainly no scientific basis to support a predisposition of this kind. Indeed, research shows that in the case of malaria at least, the traditional approach is more effective than synthetic drugs modeled on natural products. The strains of malaria that have developed resistance on recent years to chloroquine and mefloquin are still not resistant to the original cinchona bark - the natural source of quinine, on which the synthetic drugs were modeled (Wyler, 1992).

Myths: Contribution to the Marginalization of Traditional Health Care

Myth 1. Traditional medicines are only of value when their active ingredient is known and they are purified for mass production.

Traditional medical pharmacologies emphasize a principle of synergistic activity among the components of plant ingredients of herbal mixtures. This assumes that, just as the body is designed to extract multiple components from food, it is also designed to do the same from medicinal plants materials. TM typically use more than a single plant. Complex mixtures of plants form the basis of prescriptions and these are frequently prepared through a process which includes drying, crushing, heating, boiling, even reducing to a form of ash. Consequently, a chemical process is involved which transforms the structure of the molecules in each plant and produces a set of compounds which may be different from those contained in each of the individual plants in the prescription.

The emphasis in western pharmacology is on the identification of a single active ingredient in a plant as the basis for the medicinal effect. For commercial purposes, a single ingredient can be readily replicated in a laboratory, synthesized, patented and mass-produced. In the United States, natural products cannot be patented. With no patent protection, drug companies have no commercial incentive for producing drugs that use natural products. However, while commercial considerations may dictate the emphasis on identifying and patenting a single active ingredient, this is

not that the so-called "active ingredient" is the sole source of therapeutic influence in a plant. Moreover, this approach neglects the approach of combining many plants to produce a medicinal effect.

The view of the active ingredient approach is that it is reductionist and over-simplified. The multiple ingredients in a traditional prescription may include some ingredients to address the particular site of pathology, others to stimulate a more generalized immune response, and to offset side effects in some of the ingredients and to increase cellular uptake. This complex approach to pharmacology is based on a concept of the "synergistic activity" of the multiple components in a traditional formula.

In the Ayurvedic tradition of natural health care of India there is an expression that the active ingredient approach of western pharmacology takes the knowledge from the plant and throws away the wisdom. Paradoxically, the principles of synergistic activity is also the basis of the use of the most intensive applications of western pharmacology the use of multiple drug treatments in cancer chemotherapy. As in traditional medicine, it is recognized in chemotherapy that a single compound is not sufficient to produce an overall systemic change.

Myth 2. There is only limited value in traditional medicines, based on the plant screening programs of the pharmaceutical industry and of national drug development programs.

The western scientific paradigm has come to incorporate methodologies which are now viewed as science rather than as technologies reflective of one point of view in science. An example of this is the extensive natural products screening program of United States National Cancer Institute. Of the many thousands of medicinal plants and natural substances that have been screened for anti-cancer effects only a handful have been found to have any effects of therapeutic potential. The screens used by the National Cancer Institute's test for cytotoxicity - the ability of a chemical to kill cancer cells.

A series of studies of the Ayurvedic herbal preparations, Maharishi Amrit Kalash 4 and 5, including research conducted by National Cancer Institute, have found marked anti-cancer activity. Experimental studies have shown cancer prevention effects with experimental breast cancer reductions in the incidence and spread of cancer in model of lung cancer, and transformation or morphological differentiation of neurological cancer cells (neuroblastoma) into normal healthy nerve cells. No cytotoxic effect was found in any of these studies. These herbal preparations did not kill cancer, rather they produced a process of transformation in cancer cell, as some researchers have proposed, is activated at the level of DNA. This example serves as an illustration that the methodologies utilized

in modern medical science may completely overlook the effects of traditional medicines due to a fixed view of what constitutes therapeutic action.

The new Congressionally-mandated Office of Alternative Medicine at the U.S National Institutes of Health is currently working to develop a series of methodologies appropriate for the evaluation of non-western and /or complementary medical approaches.

Myth 3. Traditional health systems may have some use in the provision of care for chronic, low-level conditions, but they are of no value in providing acute or emergency care.

The conventional view is that THC is best used for chronic low level condition rather than in the treatment of acute conditions. However, in some countries, it is used in the treatment of trauma.

In Vietnam, the National Institute of Burns emphasizes a combination of modern and traditional uses traditional medicines of treatment of burns. There has been an active program of research at the Institute to develop medicines from traditional sources for use in the treatment of burns (Trung, 1992). This was developed as a matter of necessity during the war with the South and the United States, when burn treatments needed to be immediately available in remote jungle locations. Traditional medicinal plants were utilized and national program of research into this are developed. The result has been the development of over sixty different medicines for use in different aspects of burn therapy. Institute documents report that these medications are effective in generating membrane formation, inhibiting bacterial growth, stimulating the formation scar tissue on burn lesions. It is reported that treatment time with traditional medicine is markedly shorter than convention burn medication (Institute of Burns, 1993).

In addition, the Vietnamese Institute of Acupuncture in Hanoi uses acupuncture analgesia in place of general anaesthesia for major surgery. The Institute for Burns also uses this approach. Both Institute report that with post-operative acupuncture, patients experience no pain, have fewer post-operative complications and heal more quickly than is the case with general anaesthesia. This is an area that the Institute of Acupuncture has a strong interest in evaluating scientifically (Nguyen, 1993).

In April 1991, the National Council of Ministers re-named the Institute of Burns after an early Vietnamese physician le Huu Trac. According to Vietnamese health officials, it is the first time that a national institute has been named after a prominent figure in TM. This development is perceived to reflect a strengthened government commitment to integrating traditional medicine to national health care, including emergency treatment (Trungh, 1993).

Myth 4. Little is known of the safety and efficacy of TM and all national and international efforts regarding traditional medicine should be directed to toxicity and efficacy research.

While this is not correct view, since studies have been done in many countries, the level of research sophistication, the language in which it is published and the focus of the research contribute to these studies being overlooked or rejected by those applying international standards.

An initial apparent challenge to international support for traditional systems of health is the paucity of research data of a standard sufficient to satisfy western criteria of effectiveness. However, in some countries - India , China, Korea, Vietnam, Mexico to name a few - a substantial body of toxicity data has been gathered. In addition, international botanical research has identified the chemistry, including the toxicity of many of the plants used in traditional medicines. There are western studies on medicinal plants and these referenced in the University of Illinois' natural products research data base, NAPRALERT. There exists data base which contain collections of studies on the area of contemporary medicine - a term which includes many traditional systems of medicine as utilized in industrial countries. These include the British Library's Contemporary Medicine Index and the research data base of the British research council for Contemporary medicine. On review, this collection body of data may will satisfy questions regarding the safety of commonly uses herbal treatments.

Regarding the question of efficacy there exists in many countries and in most regions, a body of scientific research on the medical properties of many of the plants utilized in traditional medicine. It is important to give credit to countries and scientists involved for this undertaking. In many cases, this has been performed out of necessity due to the lack of available western medicines and has been conducted under circumstances, such as lack of equipment and chemical supplies, that are far from conducive to the production of tight research. It would be unscientific to dismiss or overlook these studies in making a determination on the availability of effectiveness data on traditional herbal medicines.

While much of this research is not available in English - but in Chinese, Hindi, Korean, Vietnamese, Spanish, Portuguese etc. - scientists familiar with these languages could be called on to evaluate this body of research as a means of supporting international investment in this area. In addition, abstracts could be translated in English for a first level of review.

To place the issue of potential toxicity of herbal medicines in perspective, in the United States where one in three people report using some form of alternative medicine (Eisenberg, 1993) and Time magazine has valued the alternative medicine industry at

\$28 billion per year, plant poisonings in 1989 were almost exclusively due to consumption of toxic ornamental plants, not herbs. Such poisonings resulted in only one fatality. In the same year, fatal poisonings by anti-depressants, analgesics, sedatives and heart drugs totals 414 (Fugh-Berman, 1993).

Myth 5. The global value of TM is two fold: 1) it serves a source of leads for the development of new western drugs; 11) this a sound basis for generating international support to preserve the world's rainforest areas and to conserve biodiversity.

Early colonial views of what are now the world's developing countries cast them, in terms of the commodities, that were of benefits to colonial interests. Minerals, timber, natural products such as spices, rubber, copper etc., farm lands, and people. Prospecting for treasure - such as, silver in Latin America, gems in the far East, gold and diamonds in Africa - was the widespread exploitation of local people and loss of their resources.

The new gold is green. "Biodiversity Prospecting" is a term that has recently appeared in the lexicon of conservation and drug development. It refers to the search for commercially useful medicinal plants in the world's rainforest areas. Using the analogy of gold prospecting, this model looks at methods of harnessing the biological treasures of forest areas for the medicinal needs of the world (Reid, 1993). A widely-publicized ethno-botanical program in Costa Rica involves a partnership between Merck Pharmaceutical and in INBio, local non-government organization in developing drugs from traditional sources, In this agreement, \$1 million was provided to Costa Rica by Merck for rainforest conservation activities and a commitment was made to return a part of the profits to the country from drugs developed through this program.

While such programs may recognize traditional and developing country intellectual property rights, concern has been expressed by traditional medicine organizations about the emphasis and priorities involved in strategies of this kind. Some critics, including those who demonstrated on the streets of Costa Rica following signing of the agreement with Merck, view this a form of neo-colonialism. The wealthy countries are seen to be looking yet again at poorer countries as a source of raw materials to develop products for use in industrialized societies with profits going elsewhere than to the countries from where the initial material, including the traditional knowledge came.

A major concern is that this trend does not contribute to the development of TM as a health care system for the poor and rural communities. Rather, it takes their medicinal knowledge and uses it to serve the demand for new drugs in industrial countries, The drugs that are being developed are for the of cancer and heart disease, the major killers in industrialized countries, rather than

for the treatment of malaria and other disease which decimate the populations of developing countries.

There is no attempt in most of these projects to develop a scientific understanding of the efficacy of the same medicinal plants in addressing the primary health care needs of the populations in the areas from which the plants derive. Some projects, however, for instance the New York Botanical Garden's ethnobotany program in Belize, have recognized this imbalance and addressed the situation through community-based projects to produce natural medicines for local consumption. They are also working to include knowledge of medicinal plants into school curricula as a means of conserving endangered traditional knowledge.

Old and New Perspectives on Traditional Systems of Health Care

Old	New
PRIMITIVE	HOLISTIC
INEFFECTIVE	COST-EFFECTIVE
MARGINALIZED	LOCALLY AVAILABLE
BECOMING EXTINCT	UNDERGOING RENEWAL
NEEDS TO BE REGULATED	NEEDS TO BE PROMOTED
SOURCE OF LEADS FOR PHARMACEUTICAL INDUSTRY	VALID IN ITS OWN RIGHT WITH LOCAL ECONOMIC VALUE
ACTIVE INGREDIENT MODEL	SYNERGISTIC ACTIVITY

Conclusion

Currently, there is wide variability in the consideration given by health planners to traditional health systems. In some countries, TM is routinely incorporated into health planning. This occurs in only a minority of cases, primarily in Asia.

In most cases, the revival has come from non-government organizations, particularly in Latin America. Health ministries in most part continue to overlook the fact that basic health care is provided to the majority of the population by traditional practitioners and budgets and national health plans lack any reference to TM.

National and international funding is currently directed to the provision of western-style health services in developing countries and indigenous communities. Research has consistently

linked reduction in morbidity and mortality rates to economic condition, educational levels, particularly to years of female education, to large scale public health measures such as sanitation and water supply programs (World Bank, 1993). While these factors have been found to lead to improved levels of health, health planners continue to operate under the view that western medical inputs are the primary means of improving levels of health.

There is no scientific evidence for believing that western medicine is the only effective way of dealing with the health problems in these countries and communities. On the contrary, as in the case of South American indigenous preparations of cinchona bark against new strains of malaria.

A new role of traditional health systems requires that they be included as a matter of policy in planning and budgeting for health care. Some of the areas that should begin to appear on national and international policy agendas for traditional health care are: 1) legislation, 2) research, 3) regulatory policies, 4) training policies, 5) biodiversity, 6) drug development and intellectual property rights, 7) inter-cultural exchange of health care strategies and traditional medical knowledge, 8) scientific, governmental and public education on traditional health care, and 9) funding. Such national and international planning should be done in consultation with traditional practitioners and their representative organizations.

References

- Balick, M. 1993. "Conservation in Today's World", Proceedings of WHO symposium on the Utilization of Medicinal Plants, WHO/Morris Arboretum, April 19-21, 1993
- Bannerman, R. et al., 1983. Traditional Medicine, WHO Publications, Geneva.
- Choe Won Sok, 1993. "Country Report", WHO symposium on the Utilization of Medicinal Plants, Morris Arboretum, Philadelphia, April 19-21, 1993.
- Eisenberg, D. et al., 1993. "Unconditional Medicine in the United States: Prevalence, Costs and Patterns of Use", New England Journal of Medicine, vol. 328 (4).
- Fugh-Berman, M.D., Adriane. 1993. "The Case for Natural Medicine, The Nations, September 6/13.
- Institute of Materia Medica, 1990. "Medicinal Plants in Vietnam", WHO Regional Publications, Western Pacific Series No. 3, Manila.

Institute of Burns, 1993. Establishment of a New Scientific Centre of Vietnam - The National Institute of Burns, named LE HUU TRAC - that needs much support. Institute of Burns Publication, Hanoi.

Jantzen, 1978, cited in Nichter, M., "Patterns of Curative Resort and Their Significance for Health Planning in South Asia", Med. Anthropol, 2, 29-58.

Kikkeil Medicxal Journal, 1981., cited in Norbeck, E and Lock, M. 1987. "Health, Illness and Medical Care in Japan", University of Hawaii Press, Honolulu, 1987.

Kleinman, A., 1980. "Patients and Healers in the Context of Cultures", University of California Press, Berkeley.

Koysooko, R. and Chuthaputti, Anchalee, 1993. "Promising Practices in the Use of Medicinal Plants in Thailand", WHO Symposium on the Utilization of Medicinal Plants, Morris Arboretum, Philadelphia, April 19-21, 1993.

Nguyen Tai Thu, 1993. Personal communication with the director of Vietnamese Institute of Acupuncture.

Reid, Walter, et al., 1993. "Biodiversity Prospecting", World Resources Institute, Washington D.C.

Sotomayor Castellon Uriel, 1992. Report of the Foundation Centro Nacional De Medicina Popular Tradicional, "Dr. Alejandro Davila Bolanos", Nicaragua.

Stephan, J. 1983. "Patterns of Legislation Concerning Traditional Medicine", in Bannerman, R., op cit.

Trungh, Le The, 1993. Personal communication with the director of the LE HUU TRAC Institute for Burns.

-----, 1992. Vietnamese Experience in the Treatment of Burns, The goi Publishers, Hanoi.

World Development Report on Health, World Bank, Washington D.C.

Wyler, M.D., David J. 1992. Editorial: Bark, Weeds and Iron Chelators - Drugs for Malaria, The New England Journal of Medicine, Nov. 19, 1992.

GENDER AND INDIGENOUS KNOWLEDGE ISSUES

Traditional Health Systems: Challenges in the Philippines

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My first recollection of an encounter with a Filipino traditional medical practitioner was when I was just a child. I was 10 years old when I fell down the stairs without my family knowing it. However, after the accident, I became ill with fever and loss of appetite prompting my uncle to bring me to a lady healer. With a basin of water, candle and prayers, she uncovered my secret. As the melted candle dropped on the water, it formed a figure which she identified as me holding a pail in one hand and slipping down the stairs. Indeed, it was what happened. Confident about her diagnosis, she readily massaged me and the fever was gone. I was no longer ill. Amazed, I could only ask, "How was she able to do it? It's magic!"

For somebody like me who has been injected with the idea of becoming a doctor, little did I know that later this experience would actually spark up my transformation as a doctor and person who believes in and respects the healing art and science of traditional medicinal practitioners. Even before entering medical college, I had already associated myself with traditional medical practitioners from whom I learned a lot about healing and curing. They impressed on me that healing is not just a technique but a discipline, a way of life, a religion, a commitment. Nobody can just be healer. He/She is a chosen one and is merely a channel of the more omnipotent power. Often, one becomes a healer after a severe sickness, after he/she has overcome physical limitations and is ready for a higher hands down the knowledge to one of his/her psychic faculties have opened up. At times, too, a healer hands down the knowledge to one of his/her children and gradually teaches him/her the discipline. The healer's strength comes from daily meditation and prayers. Whatever he/she does, be it therapeutic massage, eccentric diagnostic methods, herbal medicine, the ritual always starts with the calling of God's intercession. The healer indeed is a constant reminder of reverence to Almighty and to everything he has created.

I am reminded of a statement that says.

"The artist of the future is not going to paint pictures or dance, or sing, or write music or poetry primarily. He or she will be a wizard, a magician, a shaman who will use any and

all media to transform the consciousness of this planet."

Through time, traditional medicine has sustained itself through processes deeply rooted in a society's socio-cultural complexes. Indigenous medicine, certainly, is more than just magic. It is a set of concepts of health and illness that reflect certain values, traditions, and beliefs based on the people's way of life, or culture. Indigenous medicine is just but one of the manifestations of the people's world view, how they relate and interact with themselves as individuals, as part of the community, and the rest of the environment. Maybe, here lies the secret of its sustainability -its relevance to people's lives even as it only primarily responds to people's health problems. There is wisdom in indigenous medicine that may help in developing health systems that can be appropriate even at this time.

COMMED, the organization where I belong now, is positive about the contributory and important role Filipino traditional medicine in the development of a relevant health system for the Filipinos. This conclusion is rooted in our community experiences. The COMMED is a non-profit, not-stock, non-governmental organization that addresses itself by fielding physicians in the marginalized areas all over Philippines. This was established only in 1987 by 10 young doctors who decided to take part in the solution of the ill stricken Philippines health situation where communicable diseases remain the top killers of the Filipino society and where health remains accessible and unaffordable. In fact, 6 out 10 Filipinos die without ever receiving any form of medical attention. Whereas other doctors chose to stay in urban centres in the Philippines or abroad, COMMED physicians opted to stay in the rural areas and become a part of the process of community development.

Initially, COMMED had to answer only the shortage of human health resources in the community. However, community integration only made us realize that medical education did not prepare us to respond to community needs. There are several reasons for this.

First, health care has become totally dependent on high technology curative interventions which lowly ordinary people from Third World countries like the Philippines cannot afford. Doctors are trained to diagnose only by using machines such as X-rays, and laboratory examinations which are not available in remote areas.

Second, the health system propagates a culture which is drug dependent, doctor-oriented, and highly commercialized. Doctors are taught to write prescriptions to treat patients. However, it is also in the community that COMMED learned that the doctor's responsibility does not end at giving prescriptions. He/she organizer, teacher, and learner besides being a healer.

Third, this "modern" medicine remains unaccommodating to the traditional concepts of health and illness which the community has already internalized. Doctors are ill-equipped in understanding these concepts as they are totally marginalized in medical schools.

Deep analysis of these problems as community development workers led us to conclude that the model of medicine or health applied is irrelevant to the Philippines realities. The formal and legal health care system in the Philippines embraces that of North America. Originating from the "West", the "modern" western medicine mirrors the health perceptions and responses of a western industrialized society, not of a developing country like the Philippines. Biomedicine has ceased to become relevant yet it is the dominant model of medicine. It can actually account for only a small fraction in the whole spectrum of health. It is more of an ideology than a science. Adapting biomedicine is acquiring the value system which it reinforces consciously or unconsciously. Perpetuated is the medicalization of life events and encouragement of professional dominance. Even the reductionistic attitude towards people where people become mere objects of study is evident. It has lost its humanizing elements. More often than not, it is diseased-oriented. The psycho-social aspects of health are not given emphasis (Tan, 1990). In addition, with this model, health is uprooted from its socio-economic context. It is not any more surprising that some health problems repeatedly torment the Philippine society.

For a health care system to be relevant to the people it serves, it must be suited to economic and socio-cultural conditions of the nation. Likewise, it must also be fitted to the people's psyche or consciousness. Necessary, therefore, is a new conceptual framework that recognizes the interconnectedness of health with other aspect of the environment and that will lead to the development of a holistic approach and attitude towards health. It would be this new holistic concept that shall be the "blue print" to finding new meaning about health, about life, about Filipinos, about people.

Agenda 21, Chapter 6 states, "Health ultimately depends on the ability to manage successfully the interaction between physical, spiritual, biological, and economic/social environment... The health sector cannot meet basic needs and objectives on its own; it is dependent an social economic, and spiritual development while directly contributing to such development".

COMMED believes, therefore, that in order to develop a more relevant and appropriate health system that is responsive to the bio-psycho-socio-cultural uniqueness of Filipinos, there is a need to "tap and develop" the potential that is already existent in our culture - the indigenous medicine. There is a need to study traditional medicine as its richness in the realm of psycho-social and cultural spheres may help make our view of model for us to go

back to the civilization where it originated. We only have to study traditional medicine as openly, yet as critically, as possible and learn what ever is relevant to our times and to our people.

Currently, the Department of Health, with its new secretary is supportive of the "integration of TM into the health delivery system". This is translated as formal acceptance and utilization of herbal medicine, acupuncture, etc, in our health system. This is new but brings several issues of concern:

- what exactly is the meaning of "integration of traditional medicine and western medicine?"
- what the National Cancer Institute of USA has done, we have done several years ago. We are now producing tablets, syrups, ointments from our herbal medicine. This is excellent because we have substitutes of expensive drugs. But is this truly developing traditional medicine when the values inherent in it have been taken away? Reinforced is the "pill for every ill-culture". What about self-reliance of the community? In the process, the community will again be reduced to raw material gatherers or providers. And when the drug companies get the rights for manufacture, it will all end where it started - back to costly herbal medicine tablets.

Publishing books about our herbal medicine can be dangerous for our people as this may be a very good avenue for exploitation. research can be done by several groups. When they are proven, then they can have the money for themselves not for the people. But whose knowledge is this in the first place.

Several issues will rise up unless we are clear on what we are doing. Going back to indigenous medicine is getting back to wholeness. It is a celebration of being human again - where everybody and everything surrounding them - careful not to step on anything that may be harmful- be it to persons or to the elementals and spirits or to nature. Carved into the heart is the unwritten code of ethics respect. However, what we fear right now is that this time, this global consciousness towards indigenous knowledge systems will be taken advantage of buy the more dominant powers be it the First World or the biomedical model. This instead may be a venue of exploitation.

When we decide to get back to the indigenous, we also have to decide on the philosophy of why we are doing it, else nothing will guide us towards the direction or the goal. He who holds knowledge, holds power. He who holds the economy of the would can control the direction of the development of the indigenous systems. Then what

should be the role of the indigenous peoples in this undertaking? Without principles, philosophies guiding our path, we may only do injustice to indigenous systems and to the indigenous people.

Always, when people would like to take and understand is their knowledge and skills but not the attitude, the values, and spirituality that guided the richness of their knowledge and skills. Therefore, the stealing of intellectual property will always be a major concern because efforts may be guided by wrong values and then indigenous systems will be wrongly used - abused.

To be serious in adapting indigenous systems, it is necessary to first get into its essence. This is the challenge of getting into its core before even thinking of "using" it and manipulating it. If not, we will only get drowned by our own selfishness that is developing only for one's sake. There is a danger of getting into superficialities of things which tend to blind us. We have to get into the core and experience its totality not just a part of it. Then, we will never be left without direction.

Traditional Health System: Where to? Indeed this is not just a question that the Philippines should answer but for the whole world, because we are all accountable to humanity, to the universe and most of all, to the indigenous peoples who have given us what we have now.

At this time when there is global consciousness towards indigenous knowledge, it is crucial to stop for a while and contemplate again on the basic question that one has to answer before starting again. Why are we doing this? For whom? For what? And from the vision will be carved out answers to those questions. As the Proverbs remind us, "Without vision, it will not persist." And if we believe, we shall see. And then we'll say: "It's magic!"

TRADITIONAL HEALTH SYSTEMS IN DIFFERENT CULTURES

Ayurveda - Fundamentally Based on the Study of Substances

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Ayurveda is the medical system developed in India with its roots in the antique past history. It has always advanced with the times, enriched by new ideas, techniques and medicines that reached from outside or that come up with frequent renaissance in the country itself. It has spread its messages to outside countries also. The advent of western medicine, though at first was a challenge, has only helped to encourage its progress, absorbing new knowledge and techniques and modifying itself without sacrificing its fundamental tenets. As professor Needham, in his introduction to his monumental work "Science and Civilization in China" stated that the oriental approaches have now come up with more value to modern researches as well. According to him, what the modern science now looks for after three centuries of scientific materialism, is for an organic philosophy, which the oriental sciences already possesses. So, although Chinese medicine and Ayurveda are grouped as traditional systems, they are not to be classified as tribal medicine.

The term "Ayurveda" means "Science of Life". But this term came into vogue only with the classical Sanskrit texts called Samhitas, composed around 600 B.C. The available Samhitas are Charaka, Susruta, Bhela samhita and Kasyapa samhita although there are references to many more Samhitas. Charaka refers to general medicine, Susruta refers to surgery, Kasyapa refers to gynaecology and paediatrics and so on. But the Samhitas, as commonly known, are not original texts but redacted by later authors. All Samhitas have undergone reductions, modifications and enrichment with other branches of knowledge. It is with these Samhitas, the term Ayurveda come into vogue. Actually, the emergence of scientific medical discipline, separated from other branches of knowledge, begins only with these Samhitas, Before that, there were Vedic or Tantric medicines to protect body and mind from diseases. Charaka has three approaches - Daivavyapasraya, Satvaavajaya and Yuktivyapsraya. Daivavyapasraya is based on, divinity, magic, prayers, faith, treatment and others. Satvaavajaya means controlling of body and mind by yoga, meditation and similar techniques. Yuktivyapsraya is rationalistic treatment, considering human and universe constituted by materials (Dravyas). Ayurveda is based on the study of Dravya (substance).

There is a mythological story in Charaka on the origin of Ayurveda. Formerly, people were nomadic and subsisted on what they were

supplied by nature. They were happy and strong. But when settled life started with hoarding of food and materials, excessive use of them, lack of attention and proper responding to the calls of nature - the fourteen vegas - or natural urges as for urination defecation, sneezing and indifferent attitude to the social duties, men become impure, and more and more defiled in body and mind. The new diseases caused by impure blood, cough, consumption, bowel problems, urinary troubles, diabetes or difficult micturition, Vata troubles and so on cropped up. Sages also suffered from these new diseases. So, they assembled on the Himalayas and one sage, "Bharadwaja", went to "Indra" to study Ayurveda. On coming back, he addressed the sages and appealed to them to divert the attention to the study of Dravya and its properties, the Samanya (general), Vishesha (particular) and Samavaya (inherent), the material properties of Dravya according to tastes and their actions. This story points out how Ayurveda is different from the former approaches and how an original science of medicine emerged with a worldly outlook, based on its studies on the properties of Dravya or material substances.

Ayurveda is the science for promoting health, and for preventing and curing diseases. Diseases are due to imbalance of our internal organism due to lack of accord with environmental conditions. Ayurveda contemplates studies of man and the universe, both constituted by the same Bhutas (matter) - the five material substances but always in a changing, dynamic state. Man is a microcosm (a small universe) in the macrocosm (in the big universe) ever in motion. Man changes; has babyhood, adolescence, youth, old age. The environment changes, day and night changes, season changes. If our organism is in accord with the changing conditions, we have internal balance. If in disaccord, our internal balance is upset and diseases occur. The term "Ayu" means "a going on" (always moving). So in Ayurveda the study of the universe and man is directed to the functional aspect. It starts from presenting instructions to have a healthy life. It is to keep our body and mind together to be able to withstand the adversities due to the changes in the environment and living conditions to make the organism powerful to abate the new situations. Diseases occur due to violation of these rules. As man is a microcosm in the Macrocosm, everything in the external and internal environment are present among us and affect us. So, in maintaining and promoting health, and curing diseases, we have to consider all such factors and employ correcting factors holistically as well. Ayurveda is functional, field-oriented and holistic, and thus the study of the properties of Dravya are elaborated with such aim.

The Samhitas present the studies of Dravya, based on four philosophies, the Samkhya, Yoga, Nyaya and Vaisesika which provide the epistemological background of Ayurveda. Some researchers say that these philosophies were developed by physicians themselves for the study of Dravya. According to Samkhya, Purusha or the man is a conglomeration of 24 principles evolved from primordial nature

(prakruti) from subtle to gross, cause to effect, through function. Briefly, the whole world - animate and inanimate - are constituted by the five Bhutas; Akasa, Vayu, Jala, Agni and Prithivi. Bhuta means matter that evolved through function. Akasa is the most subtle and Prithivi the most gross. We recognize Bhutas from their properties or from the effect they produce. Akasa provides space and sound is its property. Vayu has the properties of Akasa and it stands for movement and tangibility. Agni gives light, has the properties of Akasa and Vayu and gives sight faculty. Jala has the properties of all preceding Bhutas and is the one that lubricates, connects and cools, and taste is its faculty. Prithivi or earth has all the properties of the preceding four Bhuta and it is the Bhuta which provides structure, and its faculty is smell. Although we can distinguish each Bhuta by its property, since all the material articles are constituted by the five Bhutas together, we cannot perceive them separately. We call a material made of Akasa, Vayu, Agni, Jala, and Prithivi based on their predominance in the insistence on the material aspect of Bhuta (matter) and that of mind, soul, place, time and all material things. The properties of materials vary according to the proportion of Bhutas in it. For example, a Dravya with more Akasa, Vayu, Agni is lighter and moves up. On the other hand, one with more Jala and Prithivi is heavier and moves down. But there is nothing extraneous to matter in Ayurveda. Susruta says that nothing in medicine transcends Bhuta. Animate and inanimate are of the same Bhuta. But animate evolves from inanimate. The difference between inanimate and animate is that animate have sense organs whereas, the inanimate do not have. But the sense organs evolved from the Bhutas to the properties of which they have to respond. Ear is to respond to sound. Ear is constituted predominantly with Akasa Bhuta whose property is sound. Eye is to respond to light so, eye is constituted predominantly with Agni. Skin is the organ of touch and it is predominantly of Vayu. Tongue is the organ of taste and nose for smell and so earth for Jala. But life is a dynamic condition, wherein there exists a process of build-up and disintegration. Disintegration means loss of energy. To restore and increase energy, replenishing with external matter is inevitable. So, from the very beginning of life, when sperm and ovum meet, out life throbs, feeding starts - first from mother's food, then from mother's food and outside sources and then completely from outside sources. Food is an external matter introduced into the organism to replenish energy. But organism can utilize this materials only if it is transformed to a state assimilable by the body. This is done by the Agni in the body, the process is known as Paka (digestion). If the food, that is consumed, is not digested as required, it is not properly assimilated in and utilized by the body. The body tries to push it out. In this state, if we try to push it again by some means to accomplish feeding, it causes all diseases. So, there is an elaborate study of the properties of medicinal and dietetic materials on the ways of eating, the rules to be followed, that is, properties and troubles created by good and wrong combinations of foods, the agreeable and disagreeable conditions for taking food,

including the seasonal, environmental, psychosomatic and all related conditions. Sex and sleep if abused also affects this process. Because of these, the study of properties of Dravya is the basic factor of Ayurveda. So the study of Dravya (Dravyavijnana) is the most substantial and useful part of Ayurvedic scientific literatures. But the study of Dravya in Ayurveda and in modern science has some different approaches. In Ayurveda, study starts from the total effects, experiences from properties and then to structure. Because as explained earlier, the utility of a substance, action or therapeutic step, depends on how it acts in restoring the upset balance, or maintaining the healthy functions of organism.

For understanding these, two theories are to be studied. The Tridosa theory, tells us on the factors and nature of the alterations in the internal balance. It says that, although the living body is constituted with five Bhutas, in life conditions we are concerned with the changes in the conditions of the organism. These three Dosas, although functional factors are constituted by Bhutas, Vata with Akasa and Vayu, Pitta with Agni, and Kapha with Jala and Prithivi. The changes in the internal system are produced due to excess, diminution or irregularity of three functional factors -- Vata, Pitta and Kapha. Vata stands for all movements, Pitta for heat, thermogenesis and transformation, Kapha for cold, structure and similar properties in general. These three Dosas when get upset vitiate the tissues, wastes or Malas, and create diseases. There are varieties of mixture and combinations of these Dosas. Each situation is studied by the symptoms. In health and diseases, three state of Dosas are important. So, materials, techniques and movements are meant to increasing, decreasing or regularising these Dosas. Similar properties increase them and dissimilar properties decrease.

A Dravya is studied on how its properties act on Dosa - Dryness, lightness, coldness, hardness, subtleness, instability are the properties of Vata. Pitta has the properties of unctuous and acuteness, heat, lightness, odour, flowingness and liquidity etc. Heaviness, slowness, coldness, unctuousness, smoothness, denseness, softness and stability are the properties of Kapha. The properties of substances studied as of two categories. The material properties are twenty in number -- heaviness, lightness, slowness, fastness, coldness, heat, unctuousness, dryness, slippery, hardness, denseness, amorphousness, softness, roughness, stable, unstable, subtle, gross, transparent, and opaqueness. So, by applying materials or actions opposite to the properties of Dosas, we can decrease them, and with similar properties, increase them. Another category of properties is the taste or Rasas of the substances. There are six tastes -- sweet, sour, salty, bitter, acrid, and astringent. Of these, the first three acts against Vata, but increase Kapha and the latter three increase Vata but decrease Kapha, sweet, astringent and bitter decrease Pitta, sour, salty, and acrid increase Pitta. So, all articles are studied as per their

tastes. But we cannot rely on these primary tastes alone, since there are transform actions of properties when administered. There is Vipaka or post-digestion taste, Veerya or potency and Prabhava or higher peculiar properties which overwhelm the properties of taste, Vipaka and Veerya. Sweet and salty in Vipaka turns sweet, sour remains sour; bitter, acrid and astringent act as acrid. Again Veerya is of two extreme. Hot or cold (body building or reducing). Now substances with same type of Vipaka and Veerya in action transcend all these properties and show special actions. This is Prabhava. Acrid provokes Vata but ginger although acrid pacifies Vata. Sweet increases Kapha but honey though sweet is the best medicine against Kapha. There are many exceptions and such specialities. Still using these tastes we can guess the properties of herbs, dietetic articles, minerals and animal products. Above all, it is said that the substance has its holistic effect.

All substances, Dravya, herbs, materials or animal products are studied in Ayurveda to know how they act on the Dosas - help to maintain the balanced state, provoke or pacify them and help to purify them from the system. There are groupings as per their materials properties, taste properties (as sweet group and bitter group etc.) and various other categorical medical groupings. Ayurveda is immensely rich with studies of dietetic articles and medicinal properties of herbs and others. Classical texts start with such study on groups of medicines. If we follow the study from Vedic times we can see a gradual advancement in quantity and quality of studies. In Rigveda, there are references of 67 herbs, 82 of Yajurveda, 239 of Atarvaveda, 1800 of Charaka, 513 of Susruta, 602 of Vagbhata. In Charaka, we have classifications, based on the Dharma, Karma and Rupa. Identification and classification based on origin and form starts with Charaka. He classifies medicines as Jangama (derived from animals), Oulbhika (the plants) and Parthivas (minerals). Of these Oulbhida from plants, we have Vanaspati, Vanaspathya, Veeruth and Ulbijam.

Ayurvedic literature has always progressed with the times. The present Materia Medica contain more than 2500 herbs and other items. The studies of identification from origin, forms and others were developed later in Vrikshayurveda. We have references for that in Brihatsamhita, Arthasasthra of Chanakya. It became important when planned towns and cities came up during the Mourya period. Sir William Jones, an eminent scientist and scholar and was the president of the Royal Asiatic Society, said, "if Carl Von Linne had studied this ancient language and gone through these classifications (taxonomies) he would have accepted it without any further modification."

I would like to point out that the value of this treasure is practically lost due to the conditions through which we have passed. India is a continent with various climates and geographical peculiarities, so with the richest sources of herbal and other medicines. It is believed that there are already more than 2200

recognized species of medicinal plants recognised and thousands unrecognised in India. In Ayurveda, we use about 700 herbs and other are not studied even by us. Kerala is a tropical region with immense varieties of herbs. Because of the western education people are ignoring the values of these traditional knowledge. But with the current resurgence of interest on traditional health systems and knowledge all over the world, and the active support and cooperation of scientists, researchers, medical doctors and aid agencies, we are hopeful for a glorious future to preserve this rich health care systems and traditional knowledge.

The Unani System And Traditional Health Systems in Bangladesh

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Introduction

The Unani system of medicine is one of the systemically formulated medical sciences of the East. It is a glorious heritage of the Islamic and Muslim culture, although basically it owes its origin to Greece as its name suggests. (The word "Unan" is the arabic term of Greece). The theoretical framework of the Unani system of medicine is based on the teachings of Hippocrates (460-377 B.C.) and Galen (131-210 A.D.). In fact, those were Arab scholars who developed this system and gave it a scientific base. Thus, this system is also known as Greco-Arab Medicine as well as Islamic Medicine. Hippocrates was the first person to establish that, disease was natural process and the symptoms were the reactions of the body to the disease. He was the first physician to introduce the method of taking medical histories and gave it the status of science. The well-known humoral theory is also one of his chief contributions.

Galen, later, stabilized its foundation by evaluating old theories, introducing method of pulse reading, upgrading the human Anatomy and Physiology and adding a number of new directions in diagnostic, medicine and Pharmacology, on which Arab physicians of golden Muslim era like Rhazes (850-925 A.D.) and Avicenna enriched by imbibing what was best in the contemporary systems of traditional medicine in Egypt, Syria, Iraq, Persia, India, China and other Middle East and Far East countries. It also benefitted from the native medical system in vogue at the time in various parts of Central Asia.

Basic Concepts

The Unani system of medicine is based on the humoral theory. This theory supposes the presence in the body of four humours: blood, phlegm, yellow bile and black bile. The temperaments of persons are accordingly expressed by the words sanguine, phlegmatic, choleric and melancholy according to the preponderance in them respectively of the above humours. The humours themselves are assigned temperaments: blood - hot and moist; phlegm - cold and moist; yellow bile - hot and dry; black bile - cold and dry. Drugs are also assigned temperaments. Every person is supposed to have a unique humoral constitution which represents his healthy state. Any change in this brings about a change in the state of health. A power of self-preservation or adjustment is also formulated which strives to restore any disturbances within the limits prescribed

by the constitution of the state of an individual. This corresponds to the defence mechanism called the action in case of insult to the body. In the Unani system of treatment, great reliance is placed on this power, the aim of the physician being to help and develop rather than supersede or impeded the action of this power.

Another distinctive feature of the Unani system is its emphasis on diagnosing a disease by feeling the pulse. According to Avicenna, there are ten features in the pulse to examine the states of the body. These are: 1) Quality, 2) Force, 3) Duration of movement, 4) Condition of vessel wall, soft or hard, 5) Volume, 6) Duration of the rest period, 7) Palpation of rest period, 8) Equality and inequality, 9) Balance of the pulse, and 10) Rhythm

Physical examination of Urine also helps a lot in the diagnosis of Urinogenital disorders, pathogenesis of blood and other humours, metabolic disorders, and liver disorders. The following properties of urine are observed: 1) Colour 2) Consistency 3) Clearness and Turbidity 4) Odour 5) Foam or Froth 6) Precipitates, and 7) Quality

The physical examination of stool also helps in the diagnosis of various diseases. The colour, quality, consistency and the presence of foreign bodies are observed. In addition to the above, other conventional modes of diagnosis such as inspection, palpation, percussion etc. have also been used by the Unani physicians. Regular case histories of patients were recorded and maintained as evident from the books of Rhazes and Avicenna. Now-a-days, practitioners of the Unani medicine are also availing of modern techniques such as microscopic examination, chemical analysis, radiography and electrocardiography.

Unani Concept of Human Entity

In the Unani system of medicine the human body is considered to be made up of seven components, each having a close relation to and direct bearing on the state of health of an individual and, therefore, it is necessary for an Unani physician to take all these factors of the human entity unto consideration for arriving at a correct diagnosis and deciding the line of treatment. These are:

1. Elements: The human body contains four elements namely - air, fire, water, and earth. These elements actually symbolize the four states of matter. The four elements have their own temperaments.

2. Temperament: The interaction of the element produces various states which in turn determine the temperament of an individual, and it is of paramount importance to keep the temperament of an individual in mind while prescribing the course of treatment of a given disease. Each individual has a unique temperament. A temperament may be: a) real equitable, b) equitable, or c) inequitable. Temperament is "real equitable" where the temperament

of the four elements used are in equal quantities; this does not exist. Equitable is the just and required amount of compatible temperaments. Inequitable temperament is an absence of just distribution of temperament according to their requirements.

3. Humours: Humours have already been dealt with in some detail earlier. These are in fact the fluids which the human body obtains from the food and include the various hormones and enzymes. These fluids are primary fluids and secondary fluids. The primary fluids are the four humours. The secondary fluids are also four in number and are called four fluids. These four fluids are responsible for maintaining moisture of different organs of the body and also provide nutrition to the body. According to the Unani system of medicine there are four stages of digestion: a) Gastric digestion, followed by and including intestinal digestion when food is turned into chyme and chyle and carried to liver by mesenteric veins, b) Hepatic digestion; in the course of this process chyle is converted into four humours in varying quantities, that of blood being the largest. Thus the blood which leaves the liver is intermixed with the other three humours namely Phlegm, Bile and Blackbile, c) Vessels digestion and d) Tissue digestion. When the humours are flowing in the blood vessels, every tissue absorbs its nutrition by its "attractive power" and retains it by its "retentive power". Then the "digestive" power in conjunction with "assimilative power" converts it into tissues. The waste materials in humour at this stage are excreted by the "expulsive power". Disease occurs when any disturbance develops in the equilibrium of the humour. The Unani mode of treatment, therefore, aims at restoring equilibrium of humours.

4. Organs: These are the various organs of the human body. The health or disease of each individual organ affects the state of health of the whole body.

5. Spirits: These are considered to be the life force and are given importance in the diagnosis and treatment of disease. These are carriers of different powers as defined by the Unani physicians.

6. Faculties: These are of three kinds: a) Natural power: the power of Metabolism and Reproduction. The seat of this power is liver but the process is carried on in every tissue of the body, b) Psychic power: nervous and psychic power which is seated inside the brain, and c) Vital power: power that maintains life and enables all the organs to accept the effect of psychic power. Thus the vital power with heart as its seat keeps life running the tissues.

7. Functions: These include the movements and functions of the various organs of the body. To maintain proper health of the body, it is necessary to ensure that various organs are not only in proper shape themselves but also are performing their respective functions properly. This is why Unani medical scientists have studied the functions of the human body in detail.

States of the Body

According to Unani physicians, states of the body are grouped under three heads: 1) Health in which all the functions of the body are carried out normally, 2) Disease is the opposite of Health in which one or more functions or forms of the bodily organs are at fault, and 3) Neither health nor disease in which there is neither complete health nor disease as is the case of old people or those who are convalescing.

Diseases are of two types: (1) singular disease and (2) complex disease. A singular disease is one that completes its course without complications and a complex disease is opposite of it. A singular disease may manifest itself in three forms: a) Dyscrasia, b) Structural disease, and c) Diseases of solution of unity. Further divisions of diseases have been mentioned according to different conditions in Avicenna's Al-Qanoon.

Prevention of Disease

The great scholar of Unani medicine Avicenna in his book Al-Qanoon defined the knowledge of medicine as: "This is such a knowledge by which the condition of a human body can be ascertained, by which health of a person can be retained, and if he becomes sick, then his sickness can be removed to regain his health." This definition indicates that Unani system of medicine gives more stress on the prevention of disease than its cure. In fact, Unani medicine recognised the influence of surroundings and ecological conditions on the state of health of human being long ago. Avicenna has laid down six essential prerequisites for the prevention of disease and lays great emphasis, on the one hand, on the maintenance of proper ecological balance and, on the other hand, on keeping air, water and food free from all pollution. These essentials are: 1) Air, 2) Food and Drinks, 3) Bodily movement and repose, 4) Psychic movement and repose, 5) Sleep and wakefulness, and 6) Excretion and retention.

Therapeutics

The Unani system of medicine has the following mode of treating an ailment depending upon the nature of the ailment and its causes: 1) Regimental therapy, 2) Dietotherapy, 3) Surgery, and 4) Pharmacotherapy. Single drugs or their combinations in raw form are preferred over compound formulations. The naturally occurring drugs used in Unani system are symbolic of life and are generally free from side-effects. Since such drugs are toxic in crude form, they are processed and purified in many ways before use.

Present Status

The Unani system of medicine, along with other indigenous or traditional systems, has firm root in the sub-continent - India, Pakistan, Sri-Lanka and Bangladesh and is officially recognized by the Governments of these countries. Like other countries of the sub-continent, the history of Unani medicine in Bangladesh is closely connected with the history of Muslim preachers, traders and soldiers who came from Arabic and Persian speaking areas of Asia. There were many Tabeefs of physicians of Unani medicine amongst those religious preachers, traders and soldiers. Unani medicine in Bangladesh, along with the ancient Ayurvedic system, has been existing from more than three thousand years. Such existence is possible as Unani medicine is dependent on the medicinal plants and herbs that are easily and locally available in plenty. In this connection we may remember one of the basic principles of Unani medicine - treat the patients with medicinal herbs and plants of their own land.

Unani medicine flourished in the sub-continent following the movements by Maseehul Mulk Hakim Ajmal Khan of Delhi for revival of Unani Tibb in Indo-Pak-Bangla sub-continent during the early part of this century. We shall remain ever grateful to the late Shefaul Mulk Hakim Habibur Rahman of Dhaka for his glorious contributions towards wide-spread introduction of the Unani system of medicine in the eastern part of the sub-continent.

Traditional Health System In Bangladesh

Bangladesh has a rich cultural heritage of TM comprises of Unani and Ayurvedic systems. Both these systems of TM has firm roots in Bangladesh and are being practised since long time. Even in urban areas, where organized modern health care is available and in spite of official supports to modern medicine, traditional medicine continues to be used widely and the people seem to have considerable faith in the system. Needless to say, an overwhelming majority of the rural population of Bangladesh still receive health care services from village practitioners, most of whom are practitioners of indigenous herbal medicine systems.

Since traditional health systems do not depend heavily on sophisticated technology and the drugs used for common ailments are abundantly available in the soil of the country, treatment with TM is easier, cheaper, and comparatively safer as these are generally provides long term remedies in cases where modern medicine fails.

The Government of Bangladesh, soon after independence, recognized Unani and Ayurvedic systems of medicine keeping in force the Central Act II of 1965 (i.e. the Unani, Ayurvedic and Homoeopathic Practitioners Act, 1965). An Ad-hoc Committee was formed to run the Board of Unani and Ayurvedic systems of Medicine under the said Act. In July 1983, the Bangladesh Unani and

Ayurvedic Practitioners Ordinance, 1983 was enacted repealing the 1965 Act. The functions of the Board of Unani and Ayurvedic Systems of Medicine constituted under the new Ordinance include registration of practitioners, recognition of the teaching institution, maintenance of an adequate standard of efficiency in recognized institutions, holding qualifying examinations, publication of text-books, standardisation of Unani and Ayurvedic drugs preparation and publication of pharmacopoeia, and development of research.

Soon after introduction of the historic National Drug Policy of Bangladesh in 1982, Unani and Ayurvedic drugs have been brought under drug control system by legislation to control commercial manufacturing and ensure marketing of quality drugs. For further progress two national formularies, one for the Unani and the other for the Ayurvedic drugs, have already been published by the Board.

Manpower

There are about six thousand practitioners of traditional systems of medicine in Bangladesh, who are registered or have been accepted for registration under law. Among them, about 800 are institutionally trained and qualified. Moreover, the number of unregistered traditional healers in rural areas will be no less than ten thousands.

Training

Until 1974, there were only two recognized Unani teaching institutions in Bangladesh - one at Sylhet run by the Government through the Directorate General of Health Services, and the other one at Dhaka, managed privately. But at present there are 15 teaching institutions of traditional medicine recognized and aided by the Government - 10 of Unani and 5 of Ayurvedic system. These institutions offer a four years diploma course and six months internship in the attached outdoor hospital. The curriculum includes Anatomy, Physiology, Hygiene, Pathology, Community medicine, minor surgery and other subjects of the respective system. The qualifying examinations are centrally conducted by the Board of Unani and Ayurvedic Systems of Medicine. The annual capacity of these institutions is nearly four hundred.

The newly constructed Government Unani and Ayurvedic Degree College in Dhaka became functional since 1989-90 academic session which offer five years degree course under the University of Dhaka, with an additional one year internship training in the annexed 100-bedded hospital.

Development and Research

A comprehensive project duly approved by the ECNEC, is being implemented by the Government under the title "Development of indigenous systems of medicine (Unani and Ayurvedic) in Bangladesh". The project envisages development of the following facilities:

- (a) At Dhaka:
 - (i) Establishment of one College of Unani and Ayurvedic medicine with annual intake of 100 students in degree courses.
 - (ii) Establishment of one 100 bedded hospital.
 - (iii) Setting up of a research unit.
 - (iv) Setting up of a pharmaceutical production unit.
- (b) At Regional level:
 - Establishment of three regional institutes with annual intake of 50 students in diploma courses at Chittagong, Khulna and Rajshahi.
- (c) At Sylhet:
 - Development of the existing government Tibbia College at Sylhet.
- (d) A crash program to provide training to about 2000 existing untrained traditional practitioners.

The first phase of the above projects have successfully been completed and the degree courses in the Unani and Ayurvedic medicines have already been introduced. Remaining component of the project would be taken up for implementation during current fourth five year plan. An institute for research has been functioning in Dhaka since 1976, taking up clinical trial in Asthma and Rheumatoid Arthritis by Unani and Ayurvedic systems respectively. Recently, the Board has prepared a comprehensive scheme for research in various fields of traditional medicines. The scheme is now under active consideration of the Ministry of Health and Family Welfare to establish a full-fledged National Institute for research in Unani and Ayurvedic medicines.

Conclusion

One of the objectives of our National Health Policy is to encourage systematic improvement in the practice of the indigenous systems of medicine and utilize the additional manpower available in the sector. The Government of Bangladesh is considering to incorporate TM in Primary Health Care services. An experimental study has already been completed in six places of the country with the assistance from World Health Organization to find out effective and low-cost traditional drugs for common ailments.

Traditional systems of medicine are developing in Bangladesh gradually and it is expected that within a short time the TM will be brought into the mainstream of the organized public health services and health delivery programs to achieve the goal of providing basic health care needs in the shortest possible time for large majority of the rural population with minimum expenditure. It is a common concept now that the physicians of all disciplines should serve in harmony for the total health care of the community.

The Indigenous Health System of the Peruvian Amazon

Lic. Juan Reategui S.

Synopsis

The indigenous health system is based on the principle which holds that traditional medicine must be developed in a holistic framework and in the context of the culture of the particular indigenous community, adjusting to changing circumstances and times. Thus, it is not a static system, but a dynamic one.

While Western medicine can be incorporated into the indigenous health system, a fundamental tenet of that incorporation is that the indigenous system comprises the base and Western medicine serves as a compliment. Integral to the indigenous health system is a perspective of health as a way of living and being in relation with the universe of which we are a part. An important principle of the traditional system is expressed in terms of equilibrium in our relationship with one and other, our spiritual connection with nature, and our spiritual selves. It also involves living a virtuous life and the maintenance of a continual and harmonious relationship with the gods, achieved through intermediaries and shamans.

The traditional system is composed of a number of elements, among them:

- a collection of beliefs, myths, customs and rites;
- a body of hierarchically-organized specialists;
- family groups with significant knowledge in the prevention and cure of illnesses, where women notably distinguish themselves; and
- a collection of plant, animal, and mineral resources with preventative and healing properties.

There are various levels of involvement in the health system, ranging from the familial to the level of shamans. The continuance of this system is sustained by the fact that all the necessary resources are available within the community: intelligence, knowledge, experience, and the capacity to work. Projects on a grand scale are not needed to improve the level of health in indigenous communities, but rather understanding and solidarity.

SISTEMA DE SALUD INDIGENA EN LA AMAZONIA PERUANA

El Sistema de Salud Indígena se basa en la política indígena de salud, cuyo enunciado principal señala: "desarrollar la medicina indígena con todas sus componentes y en todas sus formas de acuerdo a la realidad de cada pueblo indígena y adecuando este desarrollo a las circunstancias cambiantes de estos tiempos."

Y en lo que se refiere al sistema de salud formal señala: incorporar a nuestro que hacer en salud, los aportes eficaces de la medicina occidental, de acuerdo a nuestras necesidades. Esta incorporación debe hacerse cuidando el principio básico de nuestra política de salud donde la medicina indígena es lo fundamental, la base y eje principal, y la medicina occidental es su complemento."

Otro macro referencia que guía nuestro sistema es nuestra concepción de

salud, par nosotros es algo integral y siempre en relacion con el universo que nos rodea, se expresa como equilibrio entre nosotros, nuestros espíritus con la naturaleza; y los espíritus de esta, es el mantenimiento de buenas acciones con nuestro dioses. con sus representantes e intermediarios (los shamanes) y con la naturaleza y sus propios espíritus.

En concordancia con esta política y esta concepción venimos desarrollando nuestro sistema de salud, priorizando el fortalecimiento de los subsistemas existentes en cada pueblo indígena. Tenemos 64 pueblos indígenas. En una segunda etapa, buscaremos incorporar, en forma armonica, componentes del subsistema occidental de salud.

Componentes Del Sistema

- Subsistema indígena, mayoritaria y determinante
- Subsistema occidental, de naturaleza complementaria.

El subsistema indígena está compuesto a su vez de 64 subsistemas existentes, uno en cada pueblo indígena. Cada pueblo indígena tiene como componentes:

- Un conjunto de creencias, mitos, costumbres, ritos,
- Un cuerpo de especialistas organizadas jerarquicamente,
- Grupos familiares con significativos conocimientos en prevención y curación de enfermos, donde las mujeres destacan notablemente,
- Un conjunto de recursos vegetales, animales y minerales con propiedades preventivas y curativas.

Niveles de Atención:

- Primer nivel: familiar, mayormente, donde se resuelve la mayor parte de la demanda,
- Segundo nivel: constituido por las parteras, promotores,
- Tercer nivel: donde están los shamanes con conocimientos no solo sanitarios propiamente, si no básicamente con su capacidad de fomentar la fertilidad de la naturaleza, necesaria para la sobrevivencia humana.

Funcionamiento

El rol del dirigente indígena es fundamental en el funcionamiento de este sistema. El identifica las areas por donde comenzar, orienta, apoya y también participa en la primera aproximación diagnóstica sobre la situación de la medicina indígena en areas específicas y un inventario de los recursos disponibles, luego conduce, apoya y controla las acciones de reforzamiento que el diagnóstico aconsejó. Facilita los intercambios de experiencias entre comunidades del mismo pueblo indígena y con otros pueblos.

Los shamanes son los actores principales en el fortalecimiento de los sistemas tradicionales de salud. Actuan en su propia comunidad y en aquellos vecinos y donde los dirigentes, previotrabajo de información-aceptación, deciden que realice su en forma itinerante.

Asesoran a los dirigentes en la priorizacion de las areas de trabajo, participan en el diagnóstico situacional de los sistemas tradicionales de salud y en el inventario de los recursos disponibles, y son los actores principales en las diferentes estrategias de rescate y fortalecimiento de estos sistemas.

Además de dar atención de salud, orientar en el cultivo de plantas medicinales y en su intercambio entre comunidades, apoyan con su conocimiento sobre venenos y otros principios, en las actividades de caza y pesca, difunden la importancia de sus valores tradicionales, de sus costumbres y creencias, en especial a los jóvenes y niños de las escuelas, mas un confunto de actividades diversas que apuntan a procurar la fertilidad de la naturaleza necesaria para la sobrevivencia humana.

En estas labores colaboran con el los otros especialistas (vegetalistas, parteras, etc.), de acuerdo a sus conocimientos y a su status dentro del grupo.

La continuidad de estas acciones está sustentada en que todos los recursos necesarios se encuentran allí, hay inteligencia, conocimientos, experiencias y capacidad de trabajo. No se necesitan de grandes proyectos para mejorar sus niveles de salud, si de comprension y de solidaridad de quienes puedan brindarles.

RESEARCH AND POLICY

Traditional Health Systems and Primary Health Care

Vanaja Ramprasad

Health care systems have evolved over several centuries all over the world. But with the advent of modern medicine, the traditional systems of health care have been relegated to the past. With the spread of allopathic systems of health care and recognised as based on science that is universal and value free, other systems of health care have been denied the status of scientificity. Despite this, the modern medicine reaches out to only roughly 15% of the population in the developing countries. There are many reasons for this, the fact that the popular medical system is culturally alienating to the people. Over the years, due to the super specialisations, and pharmaceuticalization of health, the costs of seeking care have escalated, besides being based on the reductionist method of understanding the ecology and pathology of the human body. The traditional systems of medicine are based on the conceptual framework of the pancha maha bhutas- a system, conceptualising mind, body and their interaction in dynamic terms whose interaction produces the psychosomatic entity or person. Where as in the western system the cartesian view of living organisms as machines constructed from separate parts provides the dominant conceptual frame work.

Modern medicine conceptualized the patient as the sum of a finite set of sub systems which in turn have to be seen for therapeutic purposes as relatively and functionally autonomous of each other. The knowledge systems in modern medicine are mystified and therefore vests the entire responsibility of cure with the medical personnel. Besides these major differences, the basic question the traditional systems of medicine had to confronted was the scientificity.

The status assigned to Traditional systems of medicine by modern medicine, according to Nandy and Visvanathan is as follows.

"Central to the emerging discourse on development represented by the report of the industrial commission was the following classification-

Modern Industry	Western medicine	Nation State
Intermediate or medium scale industry	Traditional medicine	Major religions or ethnic grouping
Cottage industry craft	Folk medicine	"Little cure"

In it industry, science (medicine) and the nation-state were to be parallel rubrics. Under each of these rubrics, the first category encompasses the rest below it. It is primary, allegedly more stable efficient and more bureaucratizable. The lower forms represent not the "other" as possibility but defeated unscientific structure to be absorbed, assimilated or marginalised. The logic of the intermediate of craft traditions, could survive in the short run but would eventually yield, the argument went, to the all absorbing power of the multinational industrial empires."

It is important to recognize that every culture has its own characteristic health care system. The foundational theories, concepts and principles upon which indigenous health science is based are different from the western medical science. For example in India Ayurveda has evolved as a comprehensive health care system. It addressed itself to health and disease and does not treat disease independent of facts like food habits, occupation and life styles. Health according to Ayurveda is a holistic phenomenon.

The Traditional health system in India as well as South east Asia functions through two social streams. The "lok swasthya Paramparas" which is the local folk system located in several villages of India. The system as has evolved relies on immediately available local resources like flora, fauna and minerals. Woman have been the custodians of these practices and knowledge. Their phenomenal knowledge of food and its qualities, home remedies, as birth attendants, bone setters, practitioners of acu pressure and village level herbalists has hitherto gone unnoticed and unrecorded. They have been functioning independent of state support or other organisations. The second system that originates from the Shastrya stream this consists of codified organised knowledge with theoretical foundations. They come under the Ayurvedic, Siddha, Unani and the Tibetan systems. There is evidence to say that the two streams have a symbiotic relationship.

While a vast amount of knowledge represents the wisdom of centuries of experience encompassed in folk traditions, the flow of information from the shastras to the folk traditions and vice versa has given the strong basis on which the two streams were practised. With the colonial rule for more than 400 years, by mid 19th century allopathy became the sole recipient of state patronage, resulting in a decline in the indigenous system of medicine.

With the dawn of independence there have been efforts to revive the Indian system of medicine. As a result multiple medical systems exist in India today. As mentioned earlier, the most obvious short coming of the health care system in India as in many other developing countries in that, it caters to the few at the cost of the majority. If the answer is in integrating the different systems to suit the needs of people one has to be clear how it is to be done.

The aim of revitalising the community-rooted and autonomous health traditions should be to motivate, harness the potential of the indigenous system and promote self reliance of the rural communities. Along with this, it is necessary to create a supportive atmosphere for participation of interested and competent medical research workers in this task of revitalising the indigenous medical heritage. There have been attempts in India to revitalise Traditional systems of health care and integrate it into the main stream. The exercise has taken into consideration different aspects like clinical and population based trials, drug research, documentation and communication, use of medicinal plants and training (see appendix).

Integration of health systems raises critical questions on the multiple type of drugs, multiple type of practitioners, types of training and how does the planner, administrator of policy maker deal with this plurality. Primary health care has been defined at the international conferences as essential health care, based on practical scientifically sound and socially acceptable methods, and technology made universally accessible to individuals at a cost that the community and country can afford. Primary health care addresses to:

- 1) The main health problems in the community,
- 2) Includes education concerning prevailing health problems and the methods of prevention and controlling them,
- 3) The promotion of food supply, proper nutrition, adequate and safe water supply, basic sanitation, and
- 4) Relies at local and referral levels on health workers including physicians, nurses, mid wives as well as traditional practitioners to work as a team.

If some of these aspects of Primary Health care have to be a reality a few questions need to be given a serious thought

- How will primary health care be integrated with Traditional systems of health care?
- If the government is serious about what is envisaged, will it be possible to allocate the budget to strengthen the integration?
- The existing health care systems should support Primary health care, by referral, supervision, supplies and transportation to patients, and
- Can the practice of traditional system be given the status it deserves as being holistic, not as mere treatment with medicinal plants alone.

While attempting the integration at a conceptual level, it is not possible to ignore the fact that there are critical questions we confront. For example, healers always practice in suspicion with a feeling of insecurity. How do we safeguard the interest of such healers who are not recognized and belong to acceptable system of health care? When we are concerned about the legal control of malpractice within the traditional system we also fail to take into account the self regulated modes of practices that existed in the earlier days. For example, it is recalled that ageing healers get distinct signals as their power recede. Manishe and Awasthi narrate an incident when an old man treated his patient for scorpion bite and sent him home. The patient and his relatives, however returned in an hour saying that the pain had resurfaced. The old man at once understood that some one else was challenging his powers and that he was incapable of retaliating. He sent the patient home with apologies and sat down quietly for a long while. Then all of a sudden he asked his twenty five year old son if he wanted to inherit the power. The son was happy and became the successor on the subsequent eclipse night.

How do we cope with the kind of training that was pursued by the traditional healers to pass on their powers? Sometimes the healers choose their successors. It was also the practice for the "Guru" to ask the novice to wait until the night of the forthcoming eclipse. On that night the guru takes the young entrant to a body of water and asks him to completely undress. Then he whispers the sacred chanting in the latter's ears and asks him to repeat it the whole night, staying partially immersed in water all the time. The guru advises him to revise the chanting at least a thousand times in an overnight session each year. Can this kind of training be envisaged? These examples are cited only to briefly mention on the kind of problems one can encounter in attempting to integrate the traditional systems along with the formal systems.

Besides some of these managerial problems of integration, there are other valid issues. As the market incorporates the products of traditional systems of medicine, the resource base of these systems, of communities and their rights over it, are further expropriated. The crisis in the forms of knowledge, practice and organisation of indigenous people health care deepens further.

Health for all by the year 2000 was the slogan at the time of Alma Ata declaration. But in today's burgeoning crisis of development and health care, health for all seems to be a dream of the distant past. To quote a leading authority on the health care in India (N.H.Antia) "The very title of the 1993 World Bank report "Investment in Health" indicates its perspective coming from an international monetary agency rather than from an institution concerned with social welfare with economics only a means for subserving this end. The involvement of the World Health Organization does not lend much credence as a truly international document. This is not only because of the increasingly western bias

of the WHO after the departure of Halfdan Mahler but is also reflected in the authorship of this document where 35 out of 40 are westerners and the three Tropical Diseases Institute inputs are from the US, UK, and Switzerland. The tone of the entire document and even more so of its other secretive though widely circulated counterpart report on health sector financing in India: "Coping with Adjustment and Opportunities for Reforms" is one of arrogance bordering on insolence where the World Bank and its western experts decide what ails the "need based" countries and prescribe a dose of their harsh western economic medicine which is now sought to be thrust down the throat of countries when they open their mouth for economic aid".

He further adds that the report commences by warning us that the world faces serious new health challenges due to diseases like tuberculosis as a result of AIDS, oblivious to the fact that as a result of poverty the need based countries have been suffering from a pandemic of tuberculosis for the past five decades with over 4,00,000 people dying annually of this disease in India alone. Must it require a new western disease like AIDS to draw attention to this major problem? AIDS is also being converted to mass hysteria and a new money spinner with the creation of a new demand for World Bank loans. It is obvious from the above statement that it does require an array of foreign experts to tell us what is wrong with the health of our people or the functioning of the health services of the countries that deviated from the socialist path of past independence development.

The basic reason for this, according to Antia, is the inegalitarian system developed by the ruling elite who prefer an affluent western life style regardless of the consequences to the rest. It is also a sad commentary on the World Bank report that it is oblivious to the fact that India has some of the most advanced indigenous systems of health and medical care like Ayurveda, Siddha and Yoga which see life in a far more holistic manner than their western counterpart. These systems are conscious of the importance of the mind over the physical body; also that we are a part of nature with which to live in harmony. This is age old concept ingrained in the health culture of our people which is so different from that of the west. With such vast differences in the way health is conceptualised by the communities, integrating the traditional systems with the formal system bristles with problems.

If science is defined as a body of knowledge obtained by a systematic observation of events, it can not be denied that such observations had been carried out in the past as well. There is nothing in the definition of science or the scientific method which precludes the possibility of referring back to scientific insights obtained in the past or in other cultures. Indian system of medicine by this definition certainly qualifies to be a science in its own right.

APPENDIX**Thrust Areas For The Revitalization Program**

1. Clinical and Population based trials,
2. Drug Research and Pilot Production,
3. Manuscript Research,
4. Documentation, Communication and Policy Studies,
5. Medicinal Plants Propagation and Data Base, and
6. Training

Clinical and Population Based Trails

- * On diseases with high incidence in rural areas, in collaboration with: a) traditional medicine hospitals and research centres, b) selected modern hospitals and research centres, and c) community health organizations.

A core clinical trail unit be established centrally with experience in the modern and traditional medicines, biostatistics and computer science. The objectives of this unit will be:

1. To design controlled clinical trails with technical advice from adhoc committees, where needed, from appropriate medical experts and prepare detailed written protocols.
2. To help in the selection on centres for conducting multi-centre clinical and population trails using uniform protocols and record forms/questionnaire schedules.
3. To monitor the progress of the trails through field visits if needed.
4. To centrally collect and analyze data on the trails, and
5. To prepare the first draft report and circulate for comments from participants.

Drug Research

- * Priority to drugs useful in primary health care,
- * Standardise traditional drugs found to be clinically effective on physical, chemical and biological parameters,
- * Evolve new drugs from traditional formulations,
- * Transfer tested drugs to industry for production, and
- * Provide technical know-how to the herbal medicine production units at the district level, which will supply drugs to primary health care centres.

Manuscript Research

- * Survey, collection of medical manuscripts from within India and abroad.
- * Collection of bibliographies, indexes and catalogues, critical editions of major works, concordances and data bases which are useful to researchers, teaching institutions and community health organizations.

Documentation and Communication

- * Document and evaluate local health traditions.
- * Prepare health educational materials to be used by the:
 - a) local communities and local folk practitioners
 - b) training programs in traditional and modern medical centres
 - c) community health organizations
 - d) primary health care centres
 - e) school system and
 - f) general public
- * Conduct policy studies to help develop[strategies for effective involvement of local communities and indigenous medical knowledge in primary health care.

Medicinal Plants

- * Create 100 medicinal plant reserves in different bio-geographic zones,
- * Open 100 seed banks and research nurseries to serve village communities health centres, community health organizations, social forestry departments, drugs farms, panchayats etc.,
- * Create tissue culture propagation facility for plants,
- * Open a central computerized information cell to guide users on location, availability of seeds and saplings etc., of all medicinal plants needed by traditional practitioners, and
- * Publish illustrated books, prepare slides and photographic packages on medicinal plants, and create a data base.

Training

- A. Support innovative training programs organized by community health organisers for village-level traditional health workers like the Dais, Bone-Setters, Herbal-Healers, local specialists in Visha, Nadi-Pariksha, Marma etc., in order to strengthen their traditional skills and knowledge base.

- B. Support small "Guru-Kul" types of training centres around talented traditional physicians in those medical areas where healthy traditions are alive viz.,
1. Accupressure (Varma)
 2. Pharmacy (Siddha/Ayurveda/ Unani/Self-help processing technology)
 3. Dental care (Dant Vaidya)
 4. Bone-setting (Mara Chikitsa)
 5. Eye disease (Netra Chikitsa)
 6. Mental disease (Manos-rog)
 7. Panch Karma (a form of therapeutical cleansing of the body)
 8. Visha Chikitsa (poisons)
 9. Mother and child care

Training should be given to village level health workers, medical graduates and trainees from South East Asia.

- C. Create/strengthen pilot, model teaching institutions of traditional systems at undergraduate level to demonstrate teaching standards that can lead to the improvement of the quality of medical personnel.

WHO's Policy and Activities On Traditional Medicine

**Dr. Xiaorui Zhang
World Health Organization**

Introduction

In the book entitled "Traditional Medicine and Health Care Coverage", WHO's former Director General Dr. Mahler stated that "the member States of WHO are engaged in preparing and implementing strategies for the attainment by all their people by the year 2000, if a level of health that will permit them to lead a socially and economically productive life, a goal popularly known as Health for All by the year 2000. To succeed in attaining this goal, all useful methods will have to be employed and all possible resources mobilized. Among these methods are various kinds of indigenous practices, and among those resources are various types of traditional practitioners and birth attendants".

He also stated that "this approach was endorsed by the International Conference on Primary Health Care, held in Alma Ata in 1978. The declaration of Alma Ata, describing primary health care, referred to the need for a variety of health workers, including traditional practitioners as needed, who are suitably trained socially and technically to work as a health team and to respond to the expressed needs of the community". Traditional medicine was incorporated into the WHO's program in 1976.

As defined in the general textbooks, the systems of real TM includes traditional Chinese medicine, Ayurvedic medicine, the Unani system and other indigenous medicines. Chinese, Ayurvedic and Unani medicines are the three oldest major systems of medicine with a complete theory developed over thousands of years. The term indigenous medicine refers to the "total body of knowledge", techniques for the preparation and use of substances, and measures and practices in use, which are based on the socio-cultural tradition, religious background and the knowledge of local communities. They are founded on personal experience and observations handed down from generation to generation. Such medicine is practised widely in Africa, Latin America and Asia.

Traditional practitioners include: herbalists, bone-setters, traditional birth attendants, traditional psychiatrists, spiritual healers and other specialists. These traditional practitioners are recognized, in some countries, by the community as providers of health care who use herbs, animal and mineral substances and certain other methods.

Vital Role of Traditional Medicine in Primary Health Care

Traditional indigenous medicine had been handed down from ancient times and it has played a visible role in health care

before modern medicine was developed. It is probable that 80% of the population still rely mainly on TM for satisfying the primary health care needs. The work force represented by traditional practitioners and traditional birth attendants is a potentially important resources for the delivery of primary health care. In many developing countries, medical doctors are few compared to traditional practitioners. In Ghana, for example, the medical doctors/total population ratio is 1:20,000 compared to the traditional practitioners/total population ratio is 1:200 and in Swaziland it is 1:10,000 compared to the traditional practitioners/total population ratio of 1:100. Over two-thirds of births in the world are delivered by local or traditional midwives or birth attendants. In some rural areas traditional birth attendants are the only source of assistance and care, and deliver over 90% of the births.

Medicinal plants and herbs are of great importance to the individuals and communities and they are widely used in various traditional remedies. According to the NAPRALERT report one can estimate that 35,000 - 70,000 species to herbs have at one time or another been used for medical purposes.

WHO's Activities Concerning Traditional Medicine

In the progress report on TM and modern health care presented by Director General Dr. Nakajima at the 44th World Health Assembly in 1991, it was stated that "the activities in TM that WHO undertakes, in response to requests from member states, are those that support member states in their efforts to formulate national policies on TM; to study the potential usefulness of TM, including evaluation of practices and investigating of the safety and efficacy of remedies; to upgrade the knowledge and skills of traditional and modern health practitioners; and to educate and inform the community about proven traditional health practices". I would like to emphasize two points: national policies and training programs.

1. National Policies

In the same report by Dr. Nakajima, it was pointed out that "WHO collaborates with its member states in the review of national policies, legislations and decisions on the nature and extent of the use of TM in their health systems. Activities include cooperation with ministries of health in establishing policies into primary health care programs". In developing countries, although the primary health care of the people depends on traditional remedies, only a few countries have integrated traditional forms of medicine into their national health systems, and in many countries there are no requirements for administrative regulations or the registration of traditional practitioners and herbal medicines.

Integrating traditional medicines into their national health systems is the most appropriate way for governments to ensure that indigenous remedies and medicinal plants contributes to the availability of safe and effective treatments at the primary health care level. The decision to make the TM program as part of the global program concerned with drug management and policies, recognizes the importance of plants as sources of products of medicinal value. A series of standards and guidelines have been issued by WHO Headquarters and Regional Offices. "Quality Control Methods for Medicinal Plant Materials" and Guidelines for the Assessment of Herbal Medicines" were issued by WHO/HQ in 1991. "Guidelines for National Policy on Traditional Medicine" was developed by the Regional Office for the Eastern Mediterranean in 1993. "The Research Guidelines for Evaluating the Safety and Efficacy of Herbal Medicines" was issued by the Regional Office for the Western Pacific in 1993.

2. Training on Proper Use of Traditional Medicine for Traditional Practitioners in Primary Health Care

Most traditional practitioners and birth attendants have never been trained properly and they rely on their individual practical experience. A number of herbal medicines and medicinal plants have been used for thousands of years and are still considered as involving a fairly low overall risk although this is not always the case. Cases of misuse and accidental ingestion of herbs leading to poisoning have occurred frequently in developing countries, particularly in the rural areas. Consequently, it is very necessary to upgrade the knowledge and skills of traditional practitioners and other health workers.

In order to ensure the proper and safe use of traditional remedies, as well as facilitate the utilization of local resources, guidebooks or booklets on the proper use of medicinal plants both based on local experience and modern scientific research have been issued by nation health authorities in some developing countries. The identification, collection, cultivation, storage, dosage, indications and utilization of medicinal plants have been included in these books. These books are of great significance to local practitioners, other health workers and even the public for the proper use of medicinal plants in preventing and treating common diseases. For example, in the Philippines, guidebook on the proper use of medicinal plants was issued by the National Science and Technology Authority. This guidebook includes 11 most common symptoms and 39 species of common local medicinal plants which are widely used to treat these symptoms. It also mentions identification, collection time and storage of these plants etc. In Thailand, "Manual of Medicinal Plants for Primary Health Care" is quite similar to that guidebook of Philippines. It includes 3 species of common local medicinal plants and is issued by the division of Medicinal Plant Research and Development, Department of Medical Science, Ministry of Public Health. In the Lao People's

Republic, owing to the need for affordable medicines in rural areas, the use of herbal medicines is strongly supported by the Secretary of Health. A booklet called "The medicine in your garden" describes 30 commonly used medicinal plants and has been issued by the health authorities. Comprehensive training programs for traditional healers, medical doctors and other professional health workers have been carried out for several years in some developing countries. During the training courses, two topics were introduced: primary health care and medicinal plants, including the identification, collection, cultivation, storage and utilization of medicinal plants.

Conclusion

This is 1994 and there are only 6 years before the end of the century. Due to various reasons, it is very difficult to ensure the achievement of the goal of Health for All by the year 2000. "The problems now being faced may not be susceptible to approaches that have been applied in the Past", Dr. Nakajima, Director General of WHO stated in his address to the Executive Board in January 1994; "We cannot continue doing what we have always done. Tomorrow cannot be just more of yesterday. We need flexibility and pragmatism as much as innovation".

We face the facts that today TM still plays a vital role in satisfying the primary health care needs in most developing countries. We have to reconsider that kinds of assistance and approaches should be offered to the primary health care in developing countries. It is considered with of significance to train and upgrade the knowledge and skills of traditional and modern health practitioners in the proper and safe use of TM and local resources of medicinal plants. WHO's TM program would like to strengthen cooperation with Member States, international organizations and other parties as regards the proper integration of TM into the national health care system. WHO also promotes the organization of training programs on the proper and safe use of TM for traditional practitioners and other health workers in primary health care in developing countries.

**Traditional Health Systems:
National Policy Issues and Directions**

**Hakim Mohammed Said
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Traditional Health Systems is an emerging topic to identify them from the modern system. However, it does not correlate with the true understanding of the nature, goal and scope of Traditional Medicine. In a meeting on the Promotion and Development of Traditional Medicine, organized by the World Health Organization, it was stated that "all medicine is modern so far as it is satisfactorily directed towards the common goal of providing health care, despite the setting in time, place and culture". In this light, it has already been observed that the essential difference among the various systems of medicine arise not from the difference in the goal or effects, but from the cultures of the peoples who practice the different systems.

Traditional medicine is nothing new; it has been an integral part of all human cultures since antiquity. However, as TM has not moved forward, for its own development, with the rapid advancement of science and technology, it lacks behind compared to modern medicine in the industrialised countries.

Before discussing policy issues, I would like to concentrate on two important issues that have strong effect on policy. They are educational and research priorities.

Educational Priorities

- * Positive attitude towards educational programs and guidelines on THS prepared by WHO.
- * Educating a variety of categories of health workers.
- * Establishment of the safety of TM, and allowance of mass production when safety of the drug is established.
- * Dissemination of information on TM for proper use and application.
- * Establishment of TM schools and colleges to impart basic medical education and primary health care knowledge.
- * Exploring the possibilities of bringing into light the knowledge possessed by Old Masters of medicine in medical manuscripts.
- * Provide assurance that the practice, teaching and research conform to the ethical norms.

Research Priorities

- * Collection of existing research done by scientists, doctors, traditional practitioners etc., and study them.
- * The socio-cultural basis of TM need to be included in research.
- * Creation of research centres, where multidisciplinary approach is preferred. With the help of government collaborating centres may be designated to set priorities of research.
- * The potential research areas are:
 - * Traditional practitioners attitudes and experience
 - * Techniques, technology, and fundamental principles of THS
 - * Medicinal plants research - indexing, survey and cultivation
 - * Evaluation of therapeutic programs
 - * Relationship and compatibility among drugs and diseases
 - * Promotional, educational and preventive measures
 - * Manpower development - impact and utilization of health services
 - * meta-physics, cosmology, impact of cultures and religion on various systems
 - * Manufacturing techniques and standardization of drugs
 - * Exploration of the traditional know-how in modern and scientific terms
 - * methodology of integration of traditional and modern systems

Policy Issues

Although the health facilities in most developing countries have been summed up as inadequate, the medical facilities have been observed to be on a gradual increase. While there are several health facilities such as, Basic health Units, Urban health centres, Hospitals, Immunization centres and so on, the opportunity of traditional health workers is meagre. To effectively involve traditional practitioners, definite policy is required. The governments need to consider the following aspects when formulating health policy:

- * The holistic approach of the traditional medicine
- * Traditional health systems should be encouraged, and special budgets for the promotion of TM should be provided
- * Traditional systems must be officially recognized and incorporated in the mainstream of the national health system
- * It is essential that an ethical reconciliation between the traditional and modern systems takes place, so that they can strive for a union on academic level
- * The TM should be included in the: a) primary health care programs, b) rural health development programs, c) epidemiological studies and vaccination programs, and d) projects related to socio-economic upliftment of rural population.
- * Equivalence on the academic and professional calibre of TM graduates and medical graduates must be established by the national and international health organizations and agencies
- * Adequate fund need to be allocated for private colleges of traditional/integrated medicine to conduct scientific research
- * Strict laws must be adopted to control quackery in the ethics of practices and trade industries
- * Establishment of relationship among the medical doctors, traditional practitioners and the scientists is helpful for coordination and for taking multidirectional approach to a particular problem. This joint venture is likely to abrogate the conflict between the traditional and modern professionals.

Unani Medicine in Pakistan: Current State of the Art

Pakistan has two systems of medicine: traditional and allopathic. Traditional medicine (Greco-Arab or Unani system) owes its origin in antiquity. It caters about 80 percent population of rural areas and about 65 percent in the country as a whole. The Unani system of medicine in Pakistan, as it stands today, has been modified to the local needs and the majority of the herbal drugs utilized, are cultivated and produced in the country. There are three specific issues which have distinct entities at the national level They are: a) education and practice, b) trade and industry and c) research and development.

Education and Practice

Education and practice of traditional systems of medicine are regulated under 1965 Act which provides council. Registration of educational institutions and qualified practitioners, maintenance

of educational standards and promotion of research and development are the major functions of each council. The number of registered Tibbia College is 19, and the number of qualified Hakims is about 40,000. However, the Pakistan Medical Association ignored the program for promotion of Tibb, and in the absence of patronage and sponsorship to the Unani system, only one college is now in full operation. This institution called "Hamdard College of Medicine" is now transferred to Hamdard University premises at Madinat Al-Hikmat. For the last three decades this institution has been offering Diploma of Fazil Tibb Wa Al-Harahat.

Trade and Industry

Lack of support and patronage prior to independence led to severe decline in the activities on education, practices, trade and industry with respect to Unani medicine. However, despite this fact, the system survived. There are more than ten leading Herbal Manufacturers (Dawakhana) in the country which produce good quality Unani medicines. A report on the therapeutic importance of medicinal plants, published by the Hamdard Foundation of Pakistan, enlisted about 200 medicinal plants which are being used in different formulations. But, there are quackery in the business. A number of national and multinational companies are producing herbal medicines without following the underlying ethics, principles and knowledge of the medicine.

Although the production of good quality medicinal plants is geared up in the country, exporting of products is not promising. The probable reasons may be: a) international standardization criteria, b) lack of foreign demand due to inadequate advertisement and promotional activities, c) restrictions and laws on finished goods etc. However, Tibb has secured recognition and survived, on its own merits, without governmental patronage and with tough competition against financially strong multinational companies.

Research and Development

In spite of the recommendations, given time to time, regarding planning and derivation of acts on traditional medical systems for implementation, the overall scenario remains the same. In the sixth Five-Year Plan of the country, research activities on TM was completely ignored. The seventh Five-Year plan, although contains substantial budget allocation on health sector, the amount of money for TM was less than 3 percent of the total health budget.

Some research work on herbs and herbal drugs is being carried out at the Pakistan Council of Scientific and Industrial Research Laboratory in Peshawar, Department of Pharmacology at the Agriculture University in Faisalabad, H.E.J. Research Institute of Chemistry at the University of Karachi, and in some other Universities. At the National Institute of Health in Islamabad, a fully-equipped WHO collaborating Centre for Research on TM is in

progress. But the research on cultivation and propagation seem to be of an academic in nature, where the theory, principles or therapeutics of Greco-Arab medical system are the major objectives. This centre, along with its other projects, is working for the development of essential Unani and Homoeopathic medicines. This work, however, is not supervised by experienced or qualified personnel. These experiments and studies are being conducted at various laboratories all over the country. It is therefore important to bring together the results of those experiments for coordinated effort towards further development and utilization.

**Quranic Concepts for Eliminating Negative Emotions:
Another Aspect of the Healing Effect of the Quran**

by

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Introduction and historical background:

The Quran declares that it (the Quran) is a healing.

وَنُنزِّلُ مِنَ الْقُرْآنِ مَا هُوَ شِفَاءٌ

"We reveal from the Quran that which is healing". (1) This declaration guided us at the Institute of Islamic Medicine for Education and Research to explore the various aspects of the healing effect of the Quran. The purpose of this exploration is not to prove that the Quran is right, because we are already convinced that it is. Our Quranic studies are intended to find out the details that are needed so that the healing effect of the Quran may be better utilized. Details such as mechanism of action, and indications for use; and specifics related to application such as how, when, and for how long.

We have already learned from modern scientific discoveries that numerous legislations in the Quran have a direct impact on the health of the individual. (2) These are either legislations prohibiting matters which are hazardous to health, or those enjoining matters which promote health. The most important health-promoting legislation--although it may not appear to be--is the prohibition of disbelief in God. More obviously health-related legislations are the prohibition of alcohol, excessive eating, sexual promiscuity, homosexual relations, sexual intercourse during the menstrual period, and any matter which proves to be impure or harmful. Other health-promoting legislations include enjoining prayers, fasting, ablution and bathing, breast feeding, and many other injunctions. Added to that are statements in the Quran ascribing the term "healing" to honey, or to the Quran itself. All these are the areas traditionally considered the link

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between Quranic teachings and physical health. These are, of course, supplemented by similar or related teachings and practices of our prophet Muhammad peace be upon him.

In 1984 and 1985 evidence was found that the words of the Quran had physiologic effects on the person listening to the recitation of the Quran, even without understanding the meaning of the words--although the effect was usually more pronounced when the meaning was added to the sound. (3,4) The physiologic changes that were monitored and measured in the persons listening to the Quran reflected various physical manifestations of stress reduction, and were of the type normally associated with the healing process. Since it is a known fact that prolonged stress leads to impaired immunity, and that relief or reduction of stress improves immunity, it was assumed that the stress-reducing effect of the Quran would have a favorable effect on the immune system of the body.

At that time we were also aware of the fact that the guidance contained in the Quran has an indirect positive effect on the physical health and well-being of the individual. The Quran contains teachings related to personal behavior, attitudes and dealings that guide the individual in the conduct of his or her daily affairs. It also contains teachings which deal with general matters of the society, and which--if applied correctly--will lead to the achievement of general goals such as freedom, justice, and improved economic conditions. All of these lead to the making of a balanced, emotionally stable, and successful individual who is able to make better decisions, and realize better achievements in life. Such an individual will enjoy a much higher degree of well-being and--as a result--a better emotional set-up, a better immune system, a healthier

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physical condition. (2) This was the extent of our understanding in 1985 of the relationship between the general guidance of the Quran and the health and well-being of the human being.

Since then, and during the past eight years, our understanding of the healing effect of the Quran has considerably expanded, although it is still extremely limited. We realize now that the Quran contains certain teachings that are very effective therapeutic modalities dealing with some fundamental aspects of the patho-physiology of disease in general. Consequently, these teachings could be--and should be--an integral part of treatment programs for almost all types of illnesses, especially the challenging ones that may be considered "incurable" by modern medicine. This means that the direct healing effect of the Quran is not limited to the effect of the sound of its words, but extends to its therapeutic concepts that can be applied to any person regardless of his or her belief in the Quran as the revealed word of God. These are the Quranic concepts that have proven to be very effective in helping patients get rid of their harbored negative emotions. They are logical concepts that are most suited to human nature, regardless of whether the person is Muslim or non-Muslim.

The purpose of this presentation is to introduce some of these concepts and to show how they work, and how they relate to the treatment of the majority of disease conditions.

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What are negative emotions and what is their effect on physical health?

Negative emotions are of various types. They include resentment, frustration, depression, grief, helplessness, hopelessness, anger, hate, desire for revenge, feelings of guilt, fear, anxiety, worry, insecurity--among others--or any combination of two or more of the above. All these negative emotions are very useful and beneficial for the first few moments or minutes after any acute situation because they make the person have a response appropriate to the situation. However, if they are harbored for a longer period of time beyond the first few moments or minutes, they start having negative effects on the physical health of the person harboring them. If the degree of the negative emotions is severe enough, and they are harbored for a long enough time, they can literally kill the person harboring them.

Among the numerous bad effects of negative emotions on physical health, the most serious is their suppressive effect on the immune system which results in a variety of immune deficiencies or dysfunctions. How do they do that? Ideas and emotions are a form of energy that passes through the brain: energy like electricity, light or sound energy. The immune cells have receptors that can register these ideas and emotions, either indirectly through neuro-endocrine chemicals or transmitters; or directly like an electronic monitor registers some electrical impulse, or the exposure meter of a camera registers light energy, or a radio receiver receives sound energy sent from a broadcasting station.

To put this in very simple terms, the immune cells can read the mind of their owner. If we consider the immune cells as obedient soldiers trained to do the defense and repair work, and

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consider their owner as the commander in charge of these soldiers, then these cells not only read the mind of their owner, but they take messages as orders to be obeyed and complied with. The emotional and behavioral condition of the person is thus reflected in the condition and behavior of the immune cells. If one can imagine the condition and behavior--or performance--of a person under fear, depression, anger, hopelessness, or helplessness, we can have a good idea as to how his or her immune cells will behave or perform.

Once the immune system fails to function properly, all types of physical illnesses develop. If the immune malfunction is in the form of inadequate response, we see conditions like cancer, AIDS, and all types of chronic and recurrent infections. If the immune response is excessive, we see conditions like allergies, bronchial asthma, and a variety of chronic degenerative diseases. If the immune response is misguided--when immune cells attack their own body's tissue instead of their enemies--then we have all types of auto-immune diseases like rheumatoid, lupus, juvenile diabetes, multiple sclerosis and a growing list of other challenging problems.

Of course negative emotions are not the only immune suppressors. There are other physical and chemical immune suppressors like pollutants of air, water, and food; certain food items like refined sugar and certain processed foods; some prescription drugs and addictive drugs; and many other factors. However, negative emotions usually have an important contributing role. All the patients with chronic illnesses associated with immune deficiency or dysfunction that we have seen in the last 7 years had excessive exposure to harbored negative emotions before the onset of their illness. This applies even in the case of new-born infants with immune dysfunctions where

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their parents had excessive exposure to harbored negative emotions. The same mechanism that applies to negative emotions and how they contribute to the development of disease also applies to positive emotions and how they contribute to the healing of disease. There is now a whole new science called "Psycho-Neuro-Immunology" which is the science of how ideas and emotions can affect the immune system, negatively or positively.

All this sounds good and marvelous. But what does the Quran have to do with all this? The Quran has a lot to do with it.

What does the Quran say and do about negative emotions?

First, the Quran makes it clear--in one way or another--that negative emotions are bad, undesirable, or harmful; then it gives us clues as to how to get rid of them. The following phrases are part of some of the Quranic statements indicating the prohibition of negative emotions, the desirability to get rid of them; or their harmful effect:

"..... do not fear", (5) لَا تَخَفْ

"..... do not despair and do not grieve" (6) وَلَا تَهِنُوا وَلَا تَحْزَنُوا

"..... do not destroy yourself out of frustration about them", (7) فَلَا تَذْهَبْ نَفْسُكَ عَلَيْهِمْ حَسْرَةً

"..... do not keep angry hate in our hearts towards the believers", (8)

لَا تَجْعَلْ فِي قُلُوبِنَا غِلًّا لِلَّذِينَ ءَامَنُوا

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" only disbelievers give up hope in the spirit of Allah", (9) لَا يَأْتِسُ مِنْ رَوْحِ اللَّهِ إِلَّا الْفَوْمُ الْكَافِرُونَ

" die with your anger" (10) مُوتُوا بِغَيْظِكُمْ , and many others.

Similar statements are expressed by our Prophet Muhammad--Peace be upon him (PBUH):

" do not get angry" (11), لَا تَغْضَبْ

" do not be helpless (or do not give up out of despair)" (12), لَا تَعْجِزْ

" we seek refuge in Thee from worry and grief" (13), أَعُوذُ بِكَ مِنَ الْهَمِّ وَالْحَزَنِ

" we seek refuge in Thee from helplessness and laziness" (14), أَعُوذُ بِكَ مِنَ الْعَجْزِ وَالْكَدَلِ

and many others.

We have to realize, however, that just telling someone to eliminate negative emotions, without telling the person how to do it, is not enough. It is often very difficult to get rid of negative emotions because they are natural human emotions, and are usually justified. But it can be done, if we learn how. This is what the Quran does. It gives us simple concepts which are very effective in dealing with specific negative emotions. However, to achieve the desired effect, we first need to understand first the mechanism of formation of the negative emotion, and also understand how the Quranic concept relates to that mechanism. To simplify the issue, we shall divide the negative emotions into three groups, with each group sharing the same etiologic mechanism then we shall find one or two Quranic concepts for each one of the three groups:

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A. The depression group: This includes resentment, frustration, depression, grief, helplessness, and hopelessness. What is the mechanism of formation of the emotions of this group? The bad list is responsible. What is the bad list? It is a list of all the bad features, situations, and circumstances that I want to change but cannot. These bad things are either in myself, in other people around me, or in the world around me. These bad things may include that I am too fat or too skinny, that my health is not good enough, or that my money is not enough. I cannot see well without glasses, I have much work I did not finish, or many challenges I cannot deal with. People around me are not cooperating with me, or not responding to my effort. There is too much crime and evil in society, or too much injustice in the world. The air is polluted, the water is polluted, the food is not healthy, and the list goes on.

A long list of all the things that I want to change. Every time I look at this list, I resent what I see but I still hope that I shall be able to change everything. A few months later when I look at the list and find it unchanged, I feel frustrated. After a few years have passed I see that the content of the list has not changed much although a few items have disappeared and were replaced by some others. Then I feel depressed. Gradually, as I keep looking at the bad list I get the feeling that nothing is working. I feel helpless and give up hope. The more I look at this bad list, the worse I feel. As I feel bad, my efficiency and productivity decrease, I get further behind, and the list gets longer. From bad to worse. The depression group is the most common cause of suicide.

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Those who have faith do not kill themselves, but if they keep the helpless and hopeless feeling in their mind, their immune cells read their mind and do the killing through a variety of disease mechanisms. What is the solution? We have to recognize three facts:

Fact number 1: The bad list is not going to disappear, ever. Since perfection is for God alone, everybody else and everything else is imperfect, or deficient. The deficiencies in myself, in the people around me, and in the world around me, are all items on the bad list. Although the bad list may change in size or appearance, it will always be there because no one and nothing will ever be perfect in this world except for God alone.

"There is nothing like Him." (15) **لَيْسَ كَمِثْلِهِ شَيْءٌ**

Fact number 2: There is another list, the list of good things and good features--in myself, in the people around me, and in the world around me. Since all good things are from God the Almighty, we shall call this list the list of blessings. I can see, I can move, I eat and go to the bathroom, I sleep and wake up, I think, I have faith, I sometimes do good deeds, others sometimes do good deeds, I can breathe--even the bad polluted air has 21% oxygen that I cannot live without--and the long list of blessings goes on and does not appear to have any end. And the list of blessings is longer than the bad list, because the blessings are too many to count. "If you would count up the blessings of Allah, never would you be

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able to number them" (16). **وَإِنْ تَعُدُّوا نِعْمَةَ اللَّهِ لَا تُحْصُوهَا**

What happens if I look at the list of blessings? I feel good, I feel cheerful, I feel grateful. When I feel good my efficiency and productivity improve. When I feel grateful I do good deeds to express my gratitude, and the list of blessings grows longer. From good to better.

Fact number 3: A law of physics says that if I focus my eyes--or attention--on a certain object, it is impossible to focus my eyes--or attention--on another object at the same time. This means that if I focus on the list of blessings, not only will I feel cheerful and grateful, with improved performance, and improved immune functions, but I will also not be able to see the bad list clearly. Once the bad list fades out of my sight, the depression and other related "miserable" emotions disappear too. These miserable and dangerous emotions did not start until I kept looking at the bad list. This law of physics also means that while I was looking at the bad list, not only was I feeling bad and suffering from a suppressed immune system, but--worse than that--I was unable to see the list of blessings. And, because I was not able to see the blessings, I was not showing gratitude for them.

Recognizing these three facts, I immediately realize that I have a choice: Either look at the list of blessings and feel cheerful and be happy, with a healthy immune system and better

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performance, and above all be grateful--be on the winning path for this world and the hereafter--or, look at the bad list and feel miserable, with a sick immune system and have poor performance, and worst of all, be ungrateful--be on the losing path for this world and the hereafter.

"We have guided him to the path, either grateful or ungrateful" (17).

إِنَّا هَدَيْنَاهُ السَّبِيلَ إِمَّا شَاكِرًا وَإِمَّا كَفُورًا

Now after understanding the mechanism of formation of the negative emotions of the depression group and the mechanism for their elimination, where is the Quranic concept? It is a simple statement that we frequently read but rarely comply with:

"Speak about the blessings of your Lord" (18). وَأَمَّا بِنِعْمَةِ رَبِّكَ فَحَدِّثْ

This is an order, a Quranic order, a Divine order that must be obeyed. It is not limited to time or space. It means that, any time I have a chance to speak about the blessings, I must do so. If I cannot find someone to speak to, I can always speak to myself. If I try to comply with this order, I shall be forced to always look at the list of blessings in order to find out what to speak about. If I ever catch myself complaining, I shall realize that at this moment I was reading from the bad list, and while doing so I was ignoring the Quranic order. This will remind me to immediately return my sight to the list of blessings.

Does this mean that I shall never look at the bad list and never have a bad feeling? Not at all. As a matter of fact I shall be looking at the bad list, probably several times every day, every time something bad happens to me or in front of me. But after a few moments or a few

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minutes--which is enough to know how to respond to the "bad" situation--I return my sight and attention to the list of blessings while I am carrying out the appropriate response. There is a lot more to be said about the application of this technique, and there are several exercises to be practiced again and again in order to increase our awareness of the content of the list of blessings. It takes one or more hours to talk to patients only about this one method, with additional follow up sessions, all of which is beyond the scope of this presentation. For now, we only need to remember the name of the method: The list of blessings; and the main statement is: Speak about the blessings of your Lord.

Every method we shall use will have two components: one is the visualization of a mental picture, and the other component is a short statement to act as a reminder. For this method, the mental picture to visualize is the image of the two lists. The statement to say is: Speak about the blessings of your Lord (18). *وَأَمَّا بِنِعْمَةِ رَبِّكَ فَحَدِّثْ*

B. The hate group: This includes anger, hate, desire for revenge, and feelings of guilt. What is the mechanism of formation of the negative emotions of this group? It is the presence of bad deeds or practices that I do not like. If the bad deeds were done by someone else I feel angry, I hate the person for what he or she did, or I may not hate the person but hate what he or she did, and I may have the desire to take revenge. If I was the one responsible for the bad deed, I feel guilty for what I did. What is the solution? We have to recognize one fact, and possess one qualification.

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The fact to recognize is that the effect of harbored hate--especially if mixed with anger--on the person harboring it is the same as the effect of concentrated acid on a metal container that contains it. The harbored hate or anger will damage the person who is harboring the hate or anger and not the one who is the object of hatred or anger. The Quranic statement "die with your anger" (10) **مُوتُوا بِغَيْظِكُمْ** is literally accurate. If anger is not completely eliminated it can ultimately lead to death. That is why we are advised not only to control our anger but to follow it with forgiveness and good deeds to be sure it is completely eliminated: "Those who restrain anger, and pardon all people, for Allah loves those who do good" (19).

وَالْكَاظِمِينَ الْغَيْظَ وَالْعَافِينَ عَنِ النَّاسِ وَاللَّهُ يُحِبُّ الْمُحْسِنِينَ

The one qualification we must have is "self love" or "to insist on what is of benefit for you"

(20) **احْرَصْ عَلَى مَا يَنْفَعُكَ**

The issue of self love is a

complex one because many "good" people have difficulty accepting the concept, or at least they feel uneasy about it because they confuse it with "bad" selfishness. It takes sometimes one hour to give the patients adequate explanation, justification, and regulation of self love from the Islamic point of view--which happens to be the logical point of view, even for non-Muslims. There is no direct statement in the Quran about self love, although the same conclusion can be reached indirectly from several other injunctions. The teachings of our Prophet Muhammad PBUH about this subject are more specific. The most direct statement is "insist on what is of benefit for you" (20), **احْرَصْ عَلَى مَا يَنْفَعُكَ**

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in addition to his statements about loving for people what you love for yourself, "to love for your brother what you love for your self" (21) **حَتَّىٰ يُحِبُّ لِأَخِيهِ مَا يُحِبُّ لِنَفْسِهِ**

The regulations of self love in relation to love of others are at three levels: the quality, the quantity, and the timing. The quality of the love I give myself is the same quality as the love I give others, always the best I have. The quantity of love and care I give myself is always less than what I give others, simply because my needs are much less than what I can give. The timing, however, is to give myself its little share first, then everybody else.

Where did we get these regulations from? These are the results of what we learn from a teaching by our Prophet Muhammad PBUH when he points to the human body as a model to learn from, indicating that the rules governing the relationship between the members of the community should be like the rules governing the relationship between the organs of the body. "The example of the believers in their kindness to each other, their cooperation, and their mercy among each other is like the body, if one of its organs complains the rest of the body comes to its rescue with attention and fever" (22), **تَرَى الْمُؤْمِنِينَ فِي تَرَاحُمِهِمْ،**

وَتَوَادُّهُمْ، وَتَمَاطِفِهِمْ، كَمَثَلِ الْجَسَدِ . إِذَا اشْتَكَى عُضْوًا، تَدَاعَى لَهُ سَائِرُ جَسَدِهِ بِالسَّهْرِ وَالْحُمَى

Once self love is clear, and its regulations are understood, we can use the concept. What is the name of the method? Self love or insist on what is of benefit for you.

What is the mental image to be visualized? The metal container with the steaming concentrated acid contained in it, knowing that I am the container and the acid is the negative emotion. What is the statement I shall use as reminder? Insist on what is of

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benefit for you (20) **أَحْرِصْ عَلَى مَا يَنْفَعُكَ** Once I realize that this negative emotion is going to damage me, I shall be very quick to get rid of it, because this is in my best interest and because I love myself. Once I get rid of the negative emotion, I shall be in a better position to deal with the persons who caused it. Either I get rid of them, or I go away from them, or I decide to continue dealing with them if this proves to be of benefit for me. In this situation, once I can see the benefits coming to me from the association with these persons, their bad deeds will not bother me any more, simply because the benefits exceed the harm. As a matter of fact, once I adopt such a positive cheerful attitude, it is quite possible that the bad persons will gradually improve.

- C. The group of fear: This includes fear, anxiety, worry, and insecurity. Helplessness is also part of this group as it was part of the depression group. What is the mechanism of formation of the emotions in this group? It is always due to the presence of an element of weakness, and weakness is always relative to something else. If I feel that my resources are less than the resources of whatever is facing me, be it a person, a cancer, a virus, a beast, or a challenge that requires more resources than I have, I will feel afraid, worried, or insecure.

What is the method? The pooling of resources. If I can find enough outside resources to add to mine to the extent that my combined resources are equal to or more than those of whatever is facing me, I shall lose the fear. The secret for the success of this method is to have

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my combined resources facing the resources of whatever is causing my fear in order to see the difference. This principle could utilize any material or human resources. However, any material or human source of support is limited and could fail me at any time . Therefore, the only source of support that is guaranteed to exceed all other resources, and that can help me in any situation or confrontation is God the Almighty. But first, I have to qualify for the love and support of God by thinking and acting according to His rules and guidance. What is the mental image to visualize? I must feel the presence of God with me as if I see Him, and visualize whatever is causing my fear in front of me. What is the statement to use as a reminder? Who is stronger or better? or "Isn't God enough for this servant? and they frighten you using those who are less than Him" (23).

أَلَيْسَ اللَّهُ بِكَافٍ عَبْدَهُ، وَيُخَوِّفُونَكَ بِالَّذِينَ مِنْ دُونِهِ

Once I realize that whatever is facing me is much less than God the Almighty, then nothing in the world can cause my fear. Once the fear is gone, I shall be in a much better position to deal with whatever was causing it. If it was a cancer or virus, my immune cells that used to be afraid and unable to attack will become confident and aggressive, and take care of the disease. If it was a human opponent, I shall have the logic and the words to reason with the person or somehow deal with the situation. If it was an animal, then just losing the fear will keep the animal from attacking me. If the will of God is that I die while fighting the disease, or fighting a human enemy or even an animal, I shall die in a winning mood, and my benefits on my list of blessings will be beyond any benefits I could dream of.

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The Quranic concepts that we have reviewed address most of the basic problems in the three groups of negative emotions. However, several other Quranic concepts have to be used to treat specific issues, specific individual situations, or a certain emotion within one of the three groups. The time does not allow us to address any of these now. I have to say, however, that the Quran is a source of endless treasures, for the practitioner of the healing arts and for everybody else. It is at the top of the list on the list of blessings.

1. Quran 17:82
2. Elkadi, A.: **Health and Healing in the Quran.**
Presented at the annual Convention of Islamic Society of North America,
Louisville, Kentucky, September 1985.
Published in J. Isl. Med. Assoc. S. Africa (1989), 5:5-7.
3. Elkadi, A.: **Documentation of the Physiologic Effects of the Quran in Man Utilizing Biofeedback Monitoring Techniques: A Controlled Study.**
Presented at the 3rd International Conference on Islamic Medicine, Istanbul, Turkey,
September 1984.
Published in Conference Proceedings. Publications of the Center of Islamic Medicine,
Kuwait.
4. Elkadi, A.: **Towards an Understanding of the Healing Effect of the Quran.**
Presented at the annual Convention of IMA of North America, Niagara Falls, New York,
July 1985.
Abstract Published in JIMA Convention Issue, 1985.
Published in J. Isl. Med. Assoc. of S. Africa (1987), 1:1-2.
5. Quran 20:68
6. Quran 3:139
7. Quran 35:8
8. Quran 59:10
9. Quran 12:87
10. Quran 3:119
11. **Bukhari's Collection of Hadith (Prophet's sayings).**
12. **Muslim's Collection of Hadith (Prophet's sayings).**
13. **Abu Dawood's Collection of Hadith (Prophet's sayings).**

References:

14. *ibid*
15. Quran 42:11
16. Quran 16:18
17. Quran 76:3
18. Quran 93:11
19. Quran 3:134
20. Muslim's Collection of Hadith (Prophet's sayings).
21. Bukhari's and Muslim's Collections of Hadith (Prophet's sayings).
22. Bukhari's Collection of Hadith (Prophet's sayings).
23. Quran 39:36

**Traditional Health Services in the Middle East:
Spiritual Aspects of Healing and their Scientific Bases**

by

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Introduction:

Traditional health services in the Middle East are primarily of two kinds: herbal treatments, and treatments using the Quran--the revealed scripture of Muslims. Quranic treatments are given in various ways; usually the healer recites certain verses of the Quran to the patient or Quranic verses are recorded on a tape which is played and listened to at certain times. This may or may not be associated with the laying on of hands, which is called "Ruqyah". Today I am not going to elaborate on the herbal treatments since the concept is quite familiar to all of you, and herbal principles are quite similar in most countries although the choice of herbs may vary from one place to another. I am going to concentrate on the Quranic treatments since the subject is more "mysterious" and less understood to most of us. Since the Quran is the revealed word of God, I use the term "spiritual aspects of healing" for any healing achieved through the use of the Quran.

Over the past ten years we--at the Institute of Islamic Medicine for Education and Research--have conducted several studies for better understanding of the healing effects of the Quran, in addition to other alternative treatment modalities. There is a statement in the Quran that the Quran has a healing effect. Although we were convinced that this statement is true, we did not know the target organs--whether the body or the mind, the mechanism of action; nor did we know other details related to usage, such as how much, for how long, and whether to use the Quran by itself or in combination with other modalities.

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Now, although our knowledge is still very limited, we already know of at least three different aspects of the healing effect of the Quran on the human body: The direct effect of sound of the Quranic words; the direct effect of the legislative aspects of the Quran; and the indirect effect of the Quranic concepts which lead to the elimination of negative emotions.

1. The direct effect of the sound of the Quranic words (1,2) :

We found that listening to recitation of the Quran results in certain physiologic responses that can be recorded using a variety of electronic monitoring parameters such as EMG (Electromyography), PPG (Photoplethysmography), EDR (Electro-Dermal Response), HR (Heart Rate), and others. These physiologic responses are of the type that is usually associated with stress reduction and with the healing process in general. The same response was present in the majority of volunteers who were non-Muslims, non-Arabic speaking, had no understanding of the Quranic words, and had no prior exposure to the Quran. This response could not be elicited in the same volunteers when similar recitation of Arabic taken from general Arabic literature was substituted for Quranic phrases. At no time were the volunteers aware of whether or not the recited material was part of the Quran. These results indicate that the sound of the Quranic words has a certain physiologic effect on the human body that is commonly associated with the healing process. We plan to conduct similar studies in the near future--God willing--to evaluate the effect of the Quran on the aura of the healer and the patient using electrophotography (Kirlian Photography).

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2. The direct effect of the legislative aspects of the Quran (3) :

We have learned from modern scientific discoveries that numerous legislations in the Quran have a direct effect on physical health. These are either prohibitions of certain matters or practices that have proven to be hazardous to health; or injunctions of health promoting practices. Prohibitions include alcohol, excessive eating and drinking, sexual promiscuity, anything that leads to the destruction of crops and offspring, and many others. Injunctions include: Prayers, fasting, and breast feeding, among others.

3. The indirect effect of the Quranic concepts (teachings) leading to the elimination of negative emotions :

We also realize that the Quran contains certain teachings that are very effective therapeutic modalities dealing with some fundamental aspects of the patho-physiology of disease in general. These are the Quranic concepts that have proven to be very effective in helping the patients get rid of harbored negative emotions.

A few examples of these concepts will be presented today. However, for the purpose of the proceedings of this meeting a separate paper dealing with this subject will be attached, and should be considered a part of this presentation (4). We strongly feel that the emotional and spiritual condition of a person has a profound effect--positive or negative--on his or her electrical and

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and electro-magnetic make up. These submolecular changes will consequently affect the chemistry and physiology of the cells, tissues, and organs of the body.

Role and type of research:

Traditional health services usually depend on age-old experience passed on from one generation to another, and traditional health practitioners often consider modern scientific experimental research as unnecessary, wasteful, and sometimes even harmful. Although there may be some truth in such a skeptic view, I still feel that scientific research has an important role to play in the traditional arts of healing. Scientific evaluation of a certain traditional practice or treatment modality will give us a better understanding of how the treatment works. Such an understanding will lead to a better utilization. In addition, the results of scientific evaluation will serve as a common language for communication between traditional health practitioners and the modern "scientific" medical community that only understands control studies, statistical analysis, and the like. Unless we, the ones who believe in the value of traditional health services can communicate our valuable information to the members of the conventional modern medical community in a language they understand, millions of patients who seek the help of conventional practitioners will continue to be deprived of the valuable traditional treatment. It should be kept in mind that "scientific methodology" may have to be revised and made more realistic. For example, our evaluation of herbal remedies does not have to be restricted to the study of purified single active ingredients but should possibly include the whole plant. The same can be said about single modality treatment vs. a multimodality approach, and so on. The use of tools to measure

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or monitor changes of the submolecular energy level may add new dimensions to our understanding of the subtle changes in health and disease, and of the intricate correlation between body, mind, and spirit.

1. Elkadi, A.: Documentation of the Physiologic Effects of the Quran in Man Utilizing Biofeedback Monitoring Techniques: A Controlled Study.
Presented at the 3rd International Conference on Islamic Medicine, Istanbul, Turkey, September 1984.
Published in Conference Proceedings. Publications of the Center of Islamic Medicine, Kuwait.
2. Elkadi, A.: Towards an Understanding of the Healing Effect of the Quran.
Presented at the annual Convention of IMA of North America, Niagara Falls, New York, July 1985.
Abstract Published in JIMA Convention Issue, 1985.
Published in J. Isl. Med. Assoc. of S. Africa (1987), 1:1-2.
3. Elkadi, A.: Health and Healing in the Quran.
Presented at the annual Convention of Islamic Society of North America, Louisville, Kentucky, September 1985.
Published in J. Isl. Med. Assoc. S. Africa (1989), 5:5-7.
4. Elkadi, A.: Quranic Concepts for Eliminating Negative Emotions: Another Aspect of the Healing Effect of the Quran.
Presented at the 5th International Conference on scientific signs of Quran and Sunnah, Moscow, Russia, September 1993.
Published in the proceedings of the Conference. Publications of the Commission of Scientific Signs of Quran and Sunnah, Muslim World League, Macca, Saudi Arabia.

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