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Lessons on integration from the developing world's experience

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It is now recognised that about half the population of industrialised countries regularly use complementary medicine. Higher education, higher income, and poor health are predictors of its use.[1] This growth in consumer demand and availability of services for complementary medicine has outpaced the development of policy by governments and health professions.

As Western governments grapple with policy issues entailed in integrating complementary medicine into national health services, many developing countries have long since addressed these issues. Their experience constitutes a valuable, although largely unexplored, pool of policy data.

Summary points

Integration works best when based on self regulation in relation to standards of practice and training

This needs to be matched by a central or regional system for drug control and evaluation and maintenance of good manufacturing practice; this system should also generate and support a comprehensive programme of research

When conventional medicine dominates complementary medicine, loss of essential features of complementary medicine can occur, and professional conflicts can arise

Policy should aim to keep fees for complementary medicine affordable and within reach of all levels of society

Major sectoral investment is a prerequisite for the development of effective services for complementary medicine; underinvestment risks perpetuating poor standards of practice, services, and products

Traditional medicine

Almost 20 years ago the World Health Organization estimated that "In many countries, 80% or more of the population living in rural areas are cared for by traditional practitioners and birth attendants."[2]

The WHO has since backed away from the 80% estimate, settling for the safer position that most of the population of most developing countries regularly use traditional medicine. Whereas most people use traditional medicine in developing countries, only a minority have regular access to reliable modern medical services. Hence the formalisation of the traditional sector has implications for equity, coverage of primary health care, and financing.

Key policy issues in integration have been outlined by Commonwealth health ministers.[3] Ministers established the Commonwealth Working Group on Traditional and Complementary Health Systems to promote and integrate traditional health systems and complementary medicine into national health care, giving consideration to several areas (box). Although it is not within the scope of this article to address all of these areas, several can be addressed by considering consumer trends, response from governments, and cost issues.

Consumers

Medical pluralism—the use of multiple forms of health care—is widespread. Consumers practise integrated health care irrespective of whether integration is officially present. In Taiwan, 60% of the public use multiple healing systems, including modern Western medicine, Chinese medicine, and religious healing.[4] A survey in two village health clinics in China's Zheijang province showed that children with upper respiratory tract infections were being prescribed an average of four separate drugs, always a combination of Western and Chinese medicine.[5] The challenge of integrated health care is to generate evidence on which illnesses are best treated through which approach. The Zheijang study found that simultaneous use of both types of treatment was so commonplace that their individual contributions were difficult to assess.

Integration

Asia has seen the most progress in incorporating its traditional health systems into national policy. Most of

Considerations by the Commonwealth Working Group on Traditional and Complementary Health Sytems

- Policy framework, including integration of traditional and conventional medicine, regulation, and provision of services
- Training of traditional and conventional practitioners
- Development of standards of practice
- Mechanisms for enhanced sharing of experiences by countries
- Evidence based research and safety of herbal medicines and practices of complementary medicine
- Conservation of medicinal plants and related intellectual property rights

this began 30-40 years ago and has accelerated in the past 10 years. In some Asian countries such as China the development has been a response to mobilising all healthcare resources in meeting national objectives for primary health care. In other countries, such as India and South Korea, change has come through politicisation of the traditional health sector and a resultant change in national policy.

Two basic policy models have been followed: an integrated approach, where modern and traditional medicine are integrated through medical education and practice (for example, China, Vietnam) and a parallel approach, where modern and traditional medicine are separate within the national health system (for example, India, South Korea).

China

In China, the integration of traditional Chinese medicine into the national healthcare system began in the late 1950s. This was in response to national planning needs to provide comprehensive healthcare services. Previously, traditional Chinese medicine had been viewed as part of an imperial legacy to be replaced by a secular healthcare system. Integration was guided by health officials trained in modern medicine; harmonisation with modern medicine was the goal. This was accomplished by a science based approach to the education of traditional Chinese medicine and an emphasis on research. Both were supported by a substantial organisational infrastructure. To many observers, modern medical control over the terms and process of integration has resulted in the loss of important aspects of traditional theory and practice, issues seemingly unimportant to modern medicine. Fewer acupuncture points are taught than in the classic system, and aspects of the theory of traditional Chinese medicine have been de-emphasised. The effect of "modernisation" resulting in a lesser system has also occurred with traditional medical education in India.

The state administration of traditional Chinese medicine now comprises nine departments and manages the entire sector, ranging from legislation, regulation, and policy through to hospital administration, drug control, and international economic and academic cooperation. Hospitals practising traditional Chinese medicine treat 200 million outpatients and almost three million inpatients annually. Overall, 95% of general hospitals in China have traditional medicine departments, which treat about 20% of outpatients daily.[6]

South Korea

South Korea established the parallel operation of two independent medical systems in 1952. It has set a goal for full integration of western and oriental medicine by the year 2001. Measures taken to improve the quality of care with oriental medicine include promotion of clinical cooperation, training of consultants, and the lifting of a ban on the employment in the public hospital sector of doctors practising oriental medicine. Most doctors practising oriental medicine work are self employed at the primary care level. The profit margin on herbal medicines for oriental medicine is variously estimated to be 100-500% compared with their basic cost. Not surprisingly, two thirds of practitioners in traditional medicine do not want herbal remedies to be included within national medical insurance.[7]

Political conflict between oriental and modern medicine has been high during the 1990s over issues of fees, the ability to sell and prescribe herbal medicines, and the licensing of practitioners in traditional medicine. As the clientele and revenues of practitioners in oriental medicine have increased, there have been moves by modern medicine to restrict the practice of specialists in oriental medicine and to ascribe their functions to modern medical practitioners trained in oriental medicine. Litigation, demonstrations and strikes, and failed government attempts at mediation were the outcome for most of the 1990s. The Korean experience highlights the difficulties when the traditional sector is not held financially accountable and when modern medical practitioners, through training, join the traditional sector and seek to dominate. The absence of a strong central control mechanism has underpinned this professional conflict in Korea.

India

In India a parallel model was adopted through the Indian Medicine Central Council Medicine Act of 1970. The council was established to oversee the development of Indian systems of medicine and to ensure good standards of training and practice. Training is in separate colleges, of which there are now over 100. These offer a basic biosciences curriculum followed by training in a traditional system. Thirty years on, however, the Department of Indian Systems of Medicine has expressed concern over the substandard quality of education in many colleges, which in the name of integration have produced hybrid curriculums and graduates, unacceptable to either modern or traditional standards. The department has made it a priority to upgrade training in Indian systems of medicine.[8]

Priorities for Indian systems of medicine include education, standardisation of drugs, enhancement of availability of raw materials, research and development, information, education and communication, and larger involvement of this type of medicine in the national system for delivering health care. The Central Council of Indian systems of medicine oversees research institutes, which evaluate treatments. The government is adding 10 traditional medicines into its

family welfare programme, funded by the World Bank and the Indian government. Medicines are for anaemia, oedema during pregnancy, postpartum problems such as pain, uterine, and abdominal complications, difficulties with lactation, nutritional deficiencies, and childhood diarrhoea.[9]

New regulations were introduced in July 2000 to improve Indian herbal medicines by establishing standard manufacturing practices and quality control. The regulations outline requirements for infrastructure, manpower, quality control and authenticity of raw materials, and absence of contamination. Of the 9000 licensed manufacturers of traditional medicines, those who qualify can immediately seek certification for good manufacturing practice. The remainder have two years to comply with the regulations and to obtain certification.

The government has also established 10 new drug testing laboratories for Indian systems of medicine and is upgrading existing laboratories to provide high quality evidence to licensing authorities of the safety and quality of herbal medicines. This replaces an ad hoc system of testing that was considered unreliable.

Randomised controlled clinical trials of selected prescriptions for Indian systems of medicine have been initiated. These will document the safety and efficacy of the prescriptions and provide the basis for their international licensure as medicines rather than simply as food supplements.[9]

Malaysia

Malaysia has recently adopted a coordinated approach to integration, based on self regulation by complementary professions. Malaysia's health minister, Honorable Dato' Chua Jui Meng, announced on 13 November 2000 the establishment of a council comprising five umbrella organisations representing Malay, Chinese, and Indian traditional health systems, complementary therapies, and homoeopathy. Under the new council, these bodies will recognise, accredit, and register their own practitioners while developing standardised training programmes, guidelines, accreditation standards, and codes of ethics.[10] This sectoral development "across the board" represents a faster track towards integration than that of Britain, where accreditation is conducted on a profession by profession basis according to the standards of training, practice, and self regulation that each profession has attained.

GIACOMO PIROZZI/PANOS PICTURES

Purists oppose the "modernisation" of their traditional practices

Africa

African countries typically utilise the parallel model. In April 2000 Ghanaian legislation established a council to regulate the practice of traditional medicine. By 2004, certified herbal medicines will be prescribed and dispensed in Ghanaian hospitals and pharmacies. Nigeria has developed guidelines for regulating herbal medicines, and draft legislation has been prepared to establish national and state traditional medicine boards for regulation of practice and to promote cooperation and research.[11]

Finance

In China, until recently, traditional Chinese medicine was centrally managed and funded. In 1980 China was the first country to negotiate a component for traditional medicine with a health sector loan from the World Bank. A recent expansion of hospital beds financed by the World Bank included provision that 20% of these be in hospitals practising traditional medicine.[12]

Through sectoral changes, resulting partly from market reforms promoted by the World Bank, services providing traditional Chinese medicine are now covered by health insurance. Only about 12% of the population has comprehensive medical insurance that covers the cost of being admitted to hospital. The proportion of uninsured may be as high as 50%. In hospitals, insured patients are more likely to receive traditional Chinese medicine. This is because one of the primary sources of a hospital ward's profit under the new market system is the 15-25% mark-up for prescribed drugs. Accordingly, the changed incentive system has become associated with increased polypharmacy. Under the market system, many hospitals in China practising traditional Chinese medicine operate at a deficit, as better equipped western hospitals attract more patients. As traditional Chinese medicine is largely an outpatient, low technology specialty, most of the income of traditional hospitals comes from the sale of traditional medicines. Even with the 25% mark-up allowed, it is hard to cover operational costs.[12] Although government subsidies currently ensure survival, there is no surplus for improving services, and further market reforms may threaten this subsidy system.

Conversely, health insurance can increase access to traditional medicine. In Taiwan, four out of five people would use traditional Chinese medicine if it were covered by national health insurance.[4] In Australia the use of acupuncture by doctors has increased greatly since the 1984 introduction of a Medicare rebate for acupuncture. In 1996, 15.1% of Australian doctors claimed for acupuncture, with almost one million insurance claims made.[13]

Insurance schemes for traditional and complementary medicine are biased towards those with the ability to pay. An equity formula is needed if the poor are to be guaranteed access to these services.

Drawing from the Asian experience,[4] it is clear that effective integration strategies will promote communication and mutual understanding among different

medical systems, evaluate traditional medicine in its totality, integrate at both theoretical and clinical levels, ensure equitable distribution of resources between complementary and conventional medicine, provide a training and educational programme for both traditional and conventional medicine, and generate a national drug policy that includes herbal medicines.

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Commentary: Challenges in using traditional systems of medicine

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Bodeker has highlighted the very important point that integration of the modern and traditional systems of medicine may result in loss of some of the basic concepts of the traditional systems of medicine. Purists in the traditional systems of medicine such as Ayurveda and Unani in India oppose this trend to "modernise" their systems, particularly when such integration is carried out by experts in allopathy. They have no objection to the use of modern concepts of the methodology of clinical trials in evaluating the efficacy and side effects of herbal preparations used in the traditional systems. Such clinical evaluation is essential because the remedies used in these systems will not be used in allopathic hospitals in a country such as India unless these have shown efficacy in well controlled trials.[1] However, carrying out randomised, double blind, multicentred trials with standardised extracts is a slow and laborious process. Furthermore, not all herbal medicines need to undergo this rigorous trial because these preparations are already in use. The situation is still further complicated because the randomised trial may not be totally appropriate for the evaluation of medicines from the traditional systems, where the Prakriti (Ayurveda system) or Mijaj (Unani system) of the individual determines the specific therapy to be used.

In the past 12 years the Indian Council of Medical Research has set up a unique network through the country for carrying out controlled clinical trials of herbal medicines.[2] The programme is monitored by a Scientific Advisory Group consisting of people from the Ayurveda, Unani, and modern allopathic systems of medicine. This group contains experts in pharmacognosy, toxicology, pharmacology, and clinical pharmacology as well as clinicians and experts in standardisation and quality control. The trials are planned and protocols prepared by the whole group. All trials are comparative, controlled, randomised, and double blind unless there is a reason for carrying out a single blind study. The trials are planned by the whole group but carried out at the centres of allopathic medicine with established investigators. There are over 20 clinical trial centres throughout the country for carrying out the multicentred studies. Using this network the council has shown the efficacy of several traditional medicines, including *Picrorhazia kurroa* in hepatitis and *Pterocarpus marsupium* in diabetes.[3] As a result of these trials these traditional medicines can be used in allopathic hospitals.

Bodeker has mentioned the very important issues of the ability to sell and prescribe herbal medicines and licensing of traditional practitioners. It is generally recognised that the regulation of traditional systems of medicine, the products used in these systems, and the practitioners of these systems are very weak in most countries. This leads to misuse of the medicines by unqualified practitioners and loss in the credibility of the system. In traditional medicine, practitioners and manufacturers (particularly the small ones) usually oppose any steps to strengthen regulation by the health administration. Their fears are that regulation such as applies to allopathic medicine is not suitable for traditional medicine and may stifle the ancient systems of medicine. In their case they need to set up the systems themselves.

The World Health Organization has initiated an effort in this direction and may be the appropriate body to help countries not only to develop a regulatory system but to take steps to meet the obligations under the Trade Related Intellectual Property Rights Agreement when these become applicable in the developing countries around 2005.

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