

	Research findings MARCH 2008	Authors ANNA DIXON	Key topics COMPLEMENTARY MEDICINE
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Regulating complementary medical practitioners

Case studies

Australia

Statistics

The main forms of alternative or complementary medicine practised in Australia are traditional Chinese medicine, naturopathy, Western herbal medicine, homeopathy and various forms of massage. Many other less-established complementary medicine modalities are also practised, but these have fewer practitioners and less developed professional structures (Department of Human Services Victoria 2003).

In 1996, it was estimated that there were 2.8 million traditional Chinese medicine consultations per year, which included 1.8 million consultations by non-medical practitioners. There are about 1.9 million consultations per year to Western herbalists and naturopaths (Commonwealth of Australia 2003). It is estimated that close to 60 per cent of Australians access some form of alternative or complementary health care, and it has been observed that usage of complementary medicine has been increasing in recent years (New South Wales Health Department 2002).

The number and type of health care practitioners who supply or provide advice on complementary medicine to consumers is large and varied. According to the Health Department of New South Wales, three different groups of health care practitioners provide complementary medicine services in Australia: registered medical doctors; unregistered professionals; and complementary medicine specialists.

In 2000, approximately 47,000 registered medical doctors were working as clinicians. Many of them prescribe or administer complementary therapies, such as meditation, acupuncture and massage. According to Bensoussan and Myers (1996), there were 1,734 doctors providing acupuncture in 1995. Regular doctors also refer patients to

complementary medicine specialists. In addition to medical doctors, registered nurses are also likely to offer some form of complementary treatment (for example, massage or meditation) (Commonwealth of Australia 2003). However, there are no data available on nurses practising complementary medicine.

Many unregistered professionals working in the field of conventional medicine, such as dieticians or psychotherapists, provide some form of complementary medicine. About 2,500 counsellors and psychotherapists are members of one of the forty professional associations that come under the umbrella of the Psychotherapy and Counselling Federation of Australia (Department of Human Services Victoria 2003). It is unknown, though, how many of them offer complementary therapies.

Additionally, there is a range of complementary medicine specialists practising outside the conventional medical system; according to the report of the Commonwealth of Australia (2003), 1,939 naturopaths, 1,710 chiropractors, 464 acupuncturists, 259 osteopaths, 352 natural therapists and about 1,500 traditional Chinese medicine practitioners offered specialist services in 1996. It has been estimated that 1,750 Western herbalist and naturopaths practised complementary medicine in 2003.

Reimbursement

Medicare, the Australian public health care system, recently introduced reimbursement for visits to a chiropractor or osteopath, if the patient has been referred by a medical doctor. Nearly all private health insurance funds offer rebates for the most common complementary therapies, such as Chinese medicine and naturopathy (McCabe 2005).

Extent of integration with conventional medicine

In order to enhance the integration of complementary medicine into Western medicine, initiatives such as the new MedicarePlus package have been launched by the central government. This process is also supported by non-state organisations such as the Australian Medical Association, the Royal Australian College of General Practitioners, and the Australasian Integrative Medicine Association (the main organisation for medical practitioners who integrate complementary medicine into their practice) (Cohen 2004).

Acupuncture, in particular, is widely integrated into conventional medicine. Graduates of university acupuncture training programmes play an increasing role in the public health sector working in allopathic hospitals and in community health centres (WHO 2001).

However, there is little communication between regular doctors and complementary medicine practitioners. McCabe (2005) reports that only 3 per cent of practitioners of naturopathy or Western herbal medicine regularly receive referrals from a doctor. Of these practitioners 44 per cent state that referrals happen only occasionally (McCabe 2005).

Overview of regulations

In Australia, complementary medicine practitioners are regulated on the state or territory level. However, apart from the professions of chiropractic and osteopathy (in all states and territories) and of traditional Chinese medicine (in Victoria only), practitioners generally labelled as providing 'complementary and alternative medicine' are not subject to statutory registration (Department of Human Services Victoria 2003). A federal government expert committee report in 2003, *Complementary Medicines in the Australian Health System*, was reviewed by the government and recommendations were passed on to state

and territory health ministers in March 2005. The recommendations deal with the definition of a 'recognised professional' for registration purposes and consider options for regulation beyond simple statutory recognition, for example co-regulation. State implementation and interpretation is currently awaited. Nevertheless, the regulation of complementary medicine practitioners is already embedded into several laws that impact on its practice by registered and unregistered health practitioners. These include:

- State and territory government regulations on infection control that require registration of premises where skin penetration occurs (affecting, for example, acupuncture).
- State legislation that regulates the possession, use, sale and supply of restricted drugs and poisons, including herbal medicine, which is regulated in the same way as over-the-counter drugs (Therapeutic Goods Act of 1989).
- Commonwealth and state legislation that controls the manufacture, labelling and advertising of therapeutic goods.
- Local government regulation that controls the establishment of clinics specialising in complementary medicine (Department of Human Services Victoria 2003).

A health profession wishing to become officially registered can make a submission to any state/territory government requesting consideration of its case. For example, the State of Victoria is currently considering representations from psychotherapists and counsellors, and from massage therapists. Complementary medicine practitioners have a strong incentive to seek professional recognition since the medical profession holds an extensive monopoly on medical care (WHO 2001). However, recognition is to proceed only if it is supported by a majority of jurisdictions, and only if the profession meets six specific criteria designed to facilitate the process of regulatory assessment (Commonwealth of Australia 2003; Department of Human Services Victoria 2003).

Unregistered health practitioners specialising in complementary medicine are encouraged to introduce professional self-regulation. This recommendation is based on the assumption that non-compliance of the members of these professions with its standards of practice would not severely affect public health (Department of Human Services Victoria 2003).

It is difficult to obtain reliable and comprehensive information on the organisations that purport to represent complementary medicine practitioners, and the estimates extend to more than a hundred organisations. In 2002, the National Herbalists' Association of Australia, in conjunction with the Federation for Natural and Traditional Therapists, proposed a model for self-regulation for complementary medicine practitioners suggesting a single Australian Council of Complementary Medicine. However, its suggestion was primarily made in the context of the requirements of the Australian Tax Office, in order to meet the criteria for an exemption from the Goods and Services Tax.

So far homeopathy is the only complementary/alternative medicine modality in Australia to have established a registration board independent of any practitioner association. To achieve this, the homeopathic associations relinquished their registration roles in 1999 with the establishment of federal government-endorsed 'competency-standards'. However, this board has no statutory status and hence is simply a self-regulatory gesture on the part of the profession.

In order to introduce more rigorous standards, including an effective self-regulatory structure, the Expert Committee on Complementary Medicines in the Health System has recommended that the Australian government revises its definition of 'recognised professional' for Goods and Services Tax assessment purposes (Commonwealth of Australia 2003).

Education, licensing and practice

A substantial number of accredited universities and institutions offer courses of study in complementary medicine. Many of these are accredited by their state/territory educational boards. Due to their long tradition and strong consumer demand, traditional Chinese medicine and acupuncture are most common at university level, and Bachelor, Master and diploma programmes are offered. Chiropractic, Western herbal medicine, naturopathy and homeopathy are taught at the South Cross University of New South Wales (WHO 2001).

DOCTORS PRACTISING COMPLEMENTARY MEDICINE

Medical doctors providing complementary therapies are not specifically regulated in Australia. According to WHO (2001), seven Australian territories (Capital Territory, Northern Territory, Territory of Christmas Islands, Territory of the Cocos Islands, Norfolk Island, South Australia and Western Australia) grant the medical profession a monopoly on providing medical care. In New South Wales, Queensland, Tasmania and Victoria, medicine or surgery can generally be practised, though with numerous restrictions (for example, unqualified persons may not recover fees and are not allowed to treat venereal diseases).

The Victorian Department of Human Services canvassed opinion on how registered practitioners who practice complementary medicine should be regulated. The general consensus from respondents was that standards of practice for registrants who incorporate complementary therapies in their practice is best dealt with through guidelines and codes rather than through legislation (Department of Human Services Victoria 2005).

CHIROPRACTIC AND OSTEOPATHY

In all states and territories, registration of both chiropractors and osteopaths is compulsory. In order to practice these forms of complementary medicine, practitioners must hold a current registration with a chiropractors/osteopaths registration board in a state or territory. These boards are responsible to the government and maintain a register of chiropractors/osteopaths similar to the register that exists for medical doctors. They also have a legal responsibility to ensure that all chiropractors/osteopaths have a minimal level of education and training and maintain professional behaviour.

The boards are constituted under the provision of state legislation, for example the Chiropractors Regulation Act (1996) and the Osteopaths Registration Regulations (1997) in Victoria, the Chiropractors Act (2001) in New South Wales or the Chiropractors Act (1964) in Western Australia.

To become a registered chiropractor in Australia, an accredited five-year chiropractic programme conducted at a university within Australia or a similar programme at an overseas university accepted by the registration boards has to be completed. University chiropractic programmes have to undergo an assessment process for accreditation. The accrediting agency for chiropractors in Australia is the Council on Chiropractic Education Australasia Inc. The Australasian Council on Chiropractic Education has been dissolved, its responsibilities (including education) having been taken over by the Council on Chiropractic Education Australasia.

Practice of these complementary medicine specialties is similarly regulated on state/territory levels. The Chiropractors Registration Board of Victoria, for example, issues professional practice guidelines. These include a Code of Professional Conduct and guidelines on matters such as the management of patient records and techniques such as spinal screening and dry needling.

Patient information and advertising are also defined within the respective registration acts of the states. The Chiropractors Registration Act of Victoria outlines the responsibilities of the Chiropractors Registration Board in relation to advertising; 'false, misleading or deceptive' advertising of chiropractic services may be penalised with fines (for example, \$5,000 for an individual practitioner and \$10,000 for a corporate body).

Similar regulations are in place for osteopaths, who are represented by the Australian Osteopathic Association. Originally founded in Victoria in 1955, the Association became a federal body in 1991. Again, legislation for registration is formed on the state/territory level. Each state/territory has a separate osteopaths' registration board, which is sometimes combined for chiropractic and osteopathy.

TRADITIONAL CHINESE MEDICINE

Traditional Chinese medicine practitioners are statutorily regulated only in the state of Victoria, where a Chinese Medicine Registration Board was formed in 2002 under the Chinese Medicine Registration Act of 2000. The purpose of the Act, which was passed by the parliament of Victoria in 2000 and became operational in 2002, is to protect the health of the public. The Board registers Chinese herbal medicine practitioners, acupuncturists and dispensers of Chinese herbs and conducts investigations into complaints about registrants' professional conduct. Only registered traditional Chinese medicine practitioners are allowed to use the respective title of their area of specialisation (registered Chinese medical practitioner, Chinese herbalist, and acupuncturist, for example). Registration must be renewed every 12 months.

Qualifications required for registration include (1) the successful completion of an approved course of study or (2) a qualification that is substantially equivalent or (3) passing an examination set by the Board or (4) holding a qualification recognised in another state/territory.

Applicants who have graduated from an approved course of study are not required to sit an examination or undertake further study. However, at this stage the Board has not approved any programme, but guidelines on course approval have been released and the Board has commenced assessing courses for approval.

There is significant variation in the provision of traditional Chinese medicine education throughout Australia. Several universities and private colleges offer courses in this speciality. Length of courses can vary from 50 to over 3,000 hours for non-medical practitioners. Course length for medical doctors ranges from 50 to 250 hours (Bensoussan and Myers 1996).

On the national level, the National Academic Standards Committee for Traditional Chinese Medicine has drafted guidelines for traditional Chinese medicine education. However, as Parker (2003) points out, these guidelines 'are not intended to be a curriculum document

for courses or as competency standards for TCM'. Moreover, these guidelines are not legally binding.

In Victoria, the Chinese Medicine Registration Board is authorised to investigate complaints, to impose requirements for further education and to monitor the clinical competence of traditional Chinese medicine practitioners. However, Parker (2003) has criticised clinical incompetence not being regarded as professional misconduct. Furthermore, investigation of competence is essentially based on peer review. It has been questioned whether these provisions adequately protect public safety.

In order to investigate allegations of professional misconduct, the Chinese Medicine Registration Board conducts formal hearings, which are open to the public. Proceedings in such hearings are formal and both the Board and the culprit are permitted to be legally represented. Sanctions against a practitioner who has violated professional conduct range from counselling, cautioning and the requirement of further education to restrictions on registration, fines, temporary suspension or expulsion from the register.

OTHER FORMS OF COMPLEMENTARY MEDICINE

There is no formal regulation of complementary medicine practitioners other than those mentioned above. The Australian National Training Authority funded a national project to establish competency-based standards for all complementary medicine training courses accredited in the Vocational and Educational Training sector. So far, competency-based standards have been established for courses of training in naturopathy, Western herbalism, massage therapy, Ayurvedic medicine, shiatsu, homeopathy and Chinese therapeutic massage (Department of Human Services Victoria 2003).

Various options for the regulation of currently unregistered complementary medicine practitioners have been discussed, including self-regulation, statutory regulation, co-regulation, negative licensing, title regulation and practice restriction. Following consumer complaints against unregulated health professions, the governments of New South Wales and Victoria recently reviewed handling mechanisms for such complaints. As a consequence, the powers for health complaints commissioners have been strengthened (New South Wales Health Department 2002; Commonwealth of Australia 2003; Department of Human Services Victoria 2003).

In 2003, the Commonwealth Expert Committee recommended that all state jurisdictions follow suit from Victoria and introduce legislation to regulate practitioners of traditional Chinese medicine as well as implement statutory regulation for other professions where appropriate.

Summary

In Australia, regulation of complementary medicine practitioners is the subject of substantial debate and government initiative. However, regulation is heterogeneous, as it is dealt with on the state/territory rather than the federal level. A nationally agreed process has been established for assessing the need for statutory regulation of unregulated health occupations. Currently, the only practices for which there is statutory registration in all states/territories are osteopathy and chiropractic. Only in Victoria are traditional Chinese medicine practitioners regulated. For unregistered practitioners, self-regulation has been recommended.

Canada

Statistics

In Canada, the main forms of complementary medicine practised are massage, naturopathy, chiropractic, acupuncture and traditional Chinese medicine. Herbalism, homeopathy and Ayurveda are also widely practised but are not regulated by any Canadian jurisdiction (WHO 2005b). Reported usage of complementary medicine ranges between 42 and 73 per cent of the population, depending on the definition of complementary medicine. In a Fraser Institute survey of 1,500 Canadians, 73 per cent of respondents reported having used complementary medicine some time in their lives, chiropractic being the form most frequently used (36 per cent), followed by relaxation techniques and massage (each 23 per cent), prayer (21 per cent) and herbal remedies (17 per cent) (Ramsey *et al* 1999).

Estimates of the use of complementary medicine within a 12-month period vary as well. Andrews and Boon (2005) estimate that between 12 and 20 per cent of Canadians had used at least one complementary therapy in the 12 months prior to the survey. These therapies were used an average of 4.4 times per year, and therapies were most often related to chronic problems, for example, back and neck pain, allergies, arthritis and rheumatism. Of those individuals who had used complementary therapies, 44.3 per cent had discussed doing so with their physician. However, lack of patient–doctor communication about the patient’s use of these therapies has been an issue of concern (Boon *et al* 2000).

Use of complementary medicine is increasing in Canada. The proportion of Canadians aged 18 and over using complementary medicine increased from 15 per cent in 1994/5 to 19 per cent in 1998/9. During this period, the use of chiropractors remained constant, and thus the rise is attributed to an increase in the use of therapies such as massage, acupuncture, homeopathy and naturopathy (Canadian Massage Therapist Association 2004).

Reimbursement

In 1997, Canadians spent more than C\$1.8 billion on complementary medicine practitioner visits. If the cost of vitamins, herbs and books related to complementary medicine is included, the total spending on complementary medicine was approximately C\$3.8 billion.

According to WHO (2005b), complementary therapies are unlikely to be reimbursed by public funds. However, some provincial plans cover chiropractic; naturopathy is covered only in British Columbia and osteopathy only in Alberta (WHO 2001). Complementary medicine is more widely covered by Workers’ Compensation Boards.

Many Canadians have supplementary private insurance for health care costs such as dentistry and ophthalmology. Individuals interviewed in the Fraser Institute study noted that 75 per cent of costs for chiropractic care were covered by private insurance. Other therapies are partially insured (36 per cent of massage costs and 41 per cent of acupuncture costs were covered). Insurance covered less than 10 per cent of costs for relaxation, homeopathy, energy healing, aromatherapy, folk remedies, imagery techniques, herbal therapies, yoga and biofeedback (Ramsey *et al* 1999).

There is significant variation between insurers with regard to these rates as there is variability between plans. Many employers are now moving towards flexible benefit plans and health care spending accounts in insurance, providing individuals with more options.

Overview of regulations

In Canada, the provinces and territories regulate complementary medicine practitioners. Only chiropractors are regulated in all provinces and territories. Some provinces have legislation for massage therapists, acupuncturists and traditional Chinese medicine practitioners as well as naturopathic doctors, but the majority of complementary medicine providers, including herbalists, homeopaths and Ayurveda practitioners, practise without being regulated (WHO 2005b).

Practitioners of regulated forms of complementary medicine have to register with bodies set up by the provincial governments, the objective being to ensure public safety through standards of training and practice. Training institutions are usually accredited by regulatory colleges (WHO 2005b).

Many complementary medicine professions seek regulation, arguing that the increased use of these therapies has produced a growing need for consumer protection and standards. Kelner *et al.* (2004) state that the regulation of complementary therapists would increase the legitimacy of providers and improve integration with conventional medicine. It has been argued that the provincial governments have an increasing interest in complementary medicine, but are slow to react to the demands of associations representing complementary therapists' groups (Kelner *et al* 2004; CTMA 2004). However, regulation also comes with a cost, usually in the form of a reduction in the scope of practice for practitioners.

According to WHO (2005b), in 2004 there were 10,000 massage therapists, more than 6,000 chiropractors, 2,000 acupuncturists, 900 naturopathic doctors and 250 traditional Chinese medicine doctors registered – compared with approximately 57,800 conventional doctors. Complementary medicine practitioners provide most of the complementary treatments; however, conventional doctors are increasingly involved in providing complementary medicine.

Conventional doctors who practice complementary medicine are regulated by the guidelines set by the College of Physicians and Surgeons of their respective province. Although many medical schools offer courses on complementary medicine, there is no universal standard for its training in the conventional medicine curriculum (WHO 2001).

CHIROPRACTIC

Chiropractors are one of the largest primary contact health care professions; about 4.5 million Canadians use their services each year and a 1995 study indicated that 44 per cent of physicians in Ontario and Alberta refer patients for chiropractic treatment. Chiropractors are regulated in all provinces. A regulatory college is responsible for setting standards for training and practice, dealing with disciplinary issues and maintaining the quality of practice and competency of chiropractors.

In Ontario, chiropractors are regulated under the Health Professions Act of 1991 and the Chiropractic Act of 1991 (WHO 2001). The Chiropractic Act limits the practice of chiropractic

to members of the College of the Chiropractors, whose members are legally permitted to use the title ‘doctor’.

According to the Health Professions Act, no persons other than those specified in the Chiropractic Act are allowed ‘to move the joints of the spine beyond the individual’s usual physiological range of motion using a fast, low-amplitude thrust’ (WHO 2001).

In Alberta, chiropractors are required to prove continuing education in order to maintain their licence to practise. This involves 75 hours of continuing training every three years for the renewal of their annual licence. Training programmes have to be accredited with listed professional bodies. Alternatively, chiropractors can participate in university studies or research (WHO 2001).

MASSAGE THERAPY

Massage therapists are regulated only in British Columbia, Ontario and Newfoundland/Labrador (WHO 2005b). Nova Scotian legislation is awaiting final proclamation; and Saskatchewan, Alberta and Manitoba have drafted legislation and are at various stages in the process. Some municipalities have bylaws that regulate the practice of massage therapy. In the City of Winnipeg, massage therapists need to obtain a licence, for which 2,200 hours of practice and graduation from a recognised massage therapy college are required.

The Canadian Massage Therapist Association is an alliance of all provincial and territorial massage therapist associations, representing 5,000 therapists (including all territories and the Northwest Territories, except Quebec). Members of the Association must have completed a 2,200-hour educational curriculum (CMTA 2004).

Due to the patchy provincial legislation, it is difficult for massage therapists (as for other complementary medicine professional that are unevenly regulated) to get referrals from a medical doctor, to move between provinces, and to be reimbursed by insurance firms.

TRADITIONAL CHINESE MEDICINE AND ACUPUNCTURE

Regulation of traditional Chinese medicine varies between the provinces/territories. Only British Columbia, Quebec and Alberta license acupuncturists; Saskatchewan and the Yukon Territories have guidelines on the practice of acupuncture (WHO 2001).

In British Columbia, both traditional Chinese medicine and acupuncture are regulated by the College of Traditional Chinese Medicine Practitioners and Acupuncturists of British Columbia. This body sets education and training requirements for applicants who are then eligible to sit the College’s licensing exams and safety courses in order to obtain a professional licence. Different traditional Chinese medicine specialties are registered separately, for example traditional Chinese medicine practitioners, acupuncturists, traditional Chinese medicine herbalists and doctors of traditional Chinese medicine.

In Alberta, acupuncture is regulated under the Health Disciplines Act of 1980 and the accompanying Acupuncture Regulation. The Regulation requires the graduates of the four colleges recognised by the government to provide training to sit a practical examination. Only applicants who have passed the examination can register as members of the acupuncturist profession. Competence in English must also be demonstrated, unless a practitioner is supervised by an English-speaking acupuncturist (WHO 2001).

In Alberta, acupuncturists are allowed to treat only those patients who have consulted a conventional doctor beforehand. If the treated condition does not improve within six months, acupuncturists are obliged to refer a patient to a doctor for further treatment. Acupuncturists are not allowed to tell patients that acupuncture heals diseases and should not encourage patients to disrupt allopathic treatment. Alberta also regulates the modes of practice for acupuncturists (for example moxibustion, acupressure, needle and electro acupuncture) and specifies procedures that are not to be delegated to non-acupuncturists (such as removing needles or taking patients' medical histories) (WHO 2001).

In Quebec, only acupuncture is regulated and the College de Rosemont is the only institution offering an accredited acupuncture programme. The professional regulatory body is the Bureau de l'Ordre des Acupuncteurs du Québec. Under the Quebec Medical Act of 1973, this regulatory body has enacted rules to regulated physicians and non-physicians practising acupuncture. These rules include training and education, practice and annual registration. Non-physician acupuncturists must graduate from a recognised college and pass an examination set by the Bureau.

Under the Medical Act, the title 'acupuncturist' is protected. Non-physician acupuncturists are not permitted to call themselves 'doctor' unless they have a doctorate in acupuncture. Physicians are allowed to practise acupuncture only if they have received appropriate training specified by the Bureau (WHO 2001).

In Ontario, a four-person MPP (member of provincial parliament) consultation group on traditional Chinese medicine and acupuncture issued recommendations in March 2005. They recommended that acupuncture practice be limited to regulated and qualified individuals and that core competencies and training be set by respective colleges or boards to ensure safety and standards of professional practice.

NATUROPATHY

In Canada, naturopathy comprises botanical (herbal) medicine, clinical nutrition, homeopathy, lifestyle counselling and stress management, manipulation, acupuncture, and oriental medicine, as well as some physical therapies such as hydrotherapy, light therapy, electric current therapy, ultrasound, massage and exercise. Naturopathic doctors provide primary health care and work in co-operation with all other health care practitioners. Non-physician naturopaths are prohibited from performing certain procedures such as prescribing allopathic drugs, obstetrics and surgery (WHO 2001).

Naturopathic practitioners are regulated in British Columbia, Saskatchewan, Manitoba, and Ontario; regulation is pending in Alberta. There is no regulation in Quebec, Nova Scotia, New Brunswick, Prince Edward Island, Newfoundland and the Yukon Territories (and no listing in Northwest Territories).

In Ontario, there was a total of 706 registered naturopathic doctors in 2005. In this province, naturopathy is regulated under the Drugless Practitioners Act (DPA). The Board of Directors of Drugless Therapy – Naturopathy has set up policies for professional conduct and standards of practice and maintains a register. Naturopathic doctors have requested inclusion under the Regulated Health Professions Act.

Naturopathic doctors registered in provinces must complete either four or five years of professional training at a recognised college of naturopathic medicine, which includes a

clinical internship. In order to be admitted to a recognised college, three years of pre-medical studies at a university and/or a Bachelor degree are required. Training includes: basic, medical, and clinical science; diagnostics; naturopathic principles; therapeutics; and also extensive clinical experience under the supervision of licensed naturopathic doctors. Graduates receive the title 'Doctor of Naturopathic Medicine' (ND).

Naturopathic doctors practising in Canada (or America) are required to have passed one or more examinations of the National Physicians Licensing Examinations administered by the North American Board of the Naturopathic Examiners. The examination consists of basic and clinical sciences as well as add-on exams for candidates specialising in homeopathy, acupuncture, obstetrics or minor surgery. Only graduates from naturopathic colleges accredited by the Council for Naturopathic Medical Education can take clinical science exams (Albert and Butar 2004).

In Alberta, practitioners are not allowed to hold a double license in naturopathy and chiropractic (WHO 2001).

UNREGULATED COMPLEMENTARY MEDICINE PRACTITIONERS

Professional associations on the national level represent many unregulated complementary medicine professions, such as herbalists, homeopaths and aromatherapists. However, their authority for self-regulation is not mandated by law. Many of them have introduced standards for training and practice, but these standards are voluntary and do not have an official status. Standards usually specify training requirements, the legal scope of practice and guidelines of good practice (WHO 2005b).

TRADITIONAL NATIVE NORTH AMERICAN MEDICINE

In the Yukon Territory, the Health Act of 1990 recognises the medical tradition of native aborigines. It is unclear whether this form of traditional medicine is regulated. Ontario accepts traditional birth attendants providing midwifery services to members of the aborigine community. This is an exemption to the rule that only doctors, nurses or midwives are allowed to assist during birth (WHO 2001).

Summary

In Canada, complementary medicine practitioners are regulated on the territory/province level. Only chiropractors are regulated in all provinces and only naturopathy, acupuncture, traditional Chinese Medicine and massage therapists are regulated in some provinces.

There is a general perception that regulation of complementary medicine practitioners is inadequate in terms of both training standards and practice. The need for regulation, however, seems to be mainly articulated by those complementary medicine professions seeking to improve legitimacy and consumer confidence. There is a multitude of complementary medicine regulatory and self-regulatory bodies in charge of defining standards and guidelines; however, since regulation takes place on the provincial level, legislation is inconsistent and requirements for practice vary substantially.

Background

Traditional Chinese medicine has a 2,500-year history. Before Western medicine was introduced in China at the end of seventeenth century, traditional Chinese medicine was the only available medical treatment. It comprises a wide range of treatments, including acupuncture, moxibustion and medication (consisting of Chinese herbal, animal and mineral medicines), as well as massage, dietary regulation and therapeutic exercise (WHO 2005b).

The regulation and promotion of traditional Chinese medicine has long been a priority for the Government of China, and traditional and Western medicine are uniquely integrated (Zhang X 1998). Since 1949, the health care system is officially committed to provide both traditional and Western medicine. The integration of both systems is written into the Chinese constitution (WHO 2005b).

Traditional Chinese medicine and Western medicine are practised alongside each other at all levels of care. All general or specialised hospitals of Western medicine have traditional medicine departments. Additionally, there are hospitals that specialise solely in traditional Chinese medicine. Other hospitals integrate Western and traditional medicine completely. There are also specific hospitals for ethnic minority groups, which offer treatment based on the medical tradition of that particular group. There are national, provincial, regional, district and community as well as military hospitals involved in the provision of traditional and Western medicine. Almost all of them are publicly run, and only very few (mainly smaller hospitals) are operated by private companies.

Since the 1950s, the number of medical institutions and practitioners in both Western medicine and traditional Chinese medicine increased substantially. There are basically three main types of traditional Chinese medicine practitioners in China today: those with university training; those with secondary education; and the village doctors trained through apprenticeships.

Statistics

In 2004, there were 2,610 traditional Chinese medicine hospitals, 167 hospitals that integrate traditional and Western medicine, and 196 hospitals for ethnic minorities offering traditional Chinese medicine services (National Statistics in Ministry of Health People's Republic of China 2005). In 2003, there were 4.8 million people working in the health care systems, of which 9.3 per cent were traditional Chinese medicine staff. Of all staff members, 174,387 were traditional Chinese medicine practitioners and 32,571 assistant traditional Chinese medicine practitioners (State Administration of Traditional Chinese Medicine 2005). There are nearly 84,000 medical facilities in China, of which 3,650 (4.4 per cent) are traditional Chinese medicine institutions. Approximately 200 million people per year receive outpatient treatment in traditional Chinese medicine hospitals (WHO 2005b).

The majority of the 970,000 rural doctors use both traditional and Western medicine for treatment and prevention. It has been estimated, that traditional Chinese medicine accounts for one-third of outpatient and a quarter of inpatient treatment in rural areas.

Reimbursement

Public and private health insurance cover traditional and Western medicine alike (WHO 2001). Most of the population is insured under a public scheme.

Overview of regulations

The Practitioner Act of the People's Republic of China regulates the health professions. The Act was passed by the National People's Congress of the People's Republic of China Board in June 1998, and came into force in May 1999. The Act is the first legislation relating to medical practitioners. It applies to all practitioners in mainland China (Ministry of Health communication).

The Practitioner Act aims to ensure medical standards, promote medical practitioners' duties and responsibilities, and protect public health and patient rights. It includes regulations governing medical examinations and the registration of practitioners, codes of practice, assessment and training as well as liability issues.

The Traditional Chinese Medicine Ordinance of the People's Republic of China was passed by the State Administration in April 2003 and came into force in October 2003. Its objective is to develop and promote traditional Chinese medicine and herbal medicine as well as to protect public health. The manufacture of traditional Chinese medicines is a major Chinese export industry.

The State Administration of Traditional Chinese Medicine, established in 1986, is responsible for the regulation, promotion, implementation and training of traditional Chinese medicine (WHO 2001). In the hospital sector, the health departments of the local governments implement traditional Chinese medicine strategies.

EDUCATION

Historically, knowledge of traditional Chinese medicine could be acquired only by undertaking an extensive apprenticeship. This system changed after 1949, when a formal educational system for traditional medicine was established, though until the 1960s both methods of training co-existed. Today, everyone who wants to practise traditional Chinese medicine must undergo a formal education and pass the relevant examinations in order to qualify for a license to practise (Article 10 and 11, Practitioner Act).

There are 30 universities and medical colleges offering undergraduate and postgraduate traditional Chinese medicine training and 51 traditional Chinese medicine further education colleges. There are 13 universities that offer doctorate programmes. Universities and colleges provide higher-level training to students with 12 years of schooling; traditional Chinese medicine further education colleges recruit students with at least nine years of formal education (Zhou and Baker 2002).

Typically, a candidate must complete five years of study to qualify as a traditional Chinese medicine doctor (WHO 2001). Because of the nature of the Chinese health care system, Western medicine is an integral part of the traditional Chinese medicine (and vice versa).

Besides those who graduate in traditional Chinese medicine from a recognised traditional Chinese medicine institution, qualified doctors, nurses and pharmacists who meet the necessary requirements can apply for the traditional Chinese medicine examination administered by the Ministry of Health (WHO 2005b).

The new act also promotes continuous learning for traditional Chinese medicine practitioners. It is the responsibility of the health department within the local governments to provide and promote training programmes for medical practitioners.

PRACTICE

The Practitioner Act also regulates the practice of traditional Chinese medicine practitioners. Following the introduction of the Act, a practitioner's registration system has been established. In order to be registered, practitioners have to pass an examination designed by the Health Department of the State Administration. It is conducted once a year by the health departments of the provinces. After passing the examination, practitioners can register at the local health department and obtain a certificate stating their area of specialisation (for example acupuncture or herbal medicine). The practitioner can practise traditional Chinese medicine in accordance with his or her specialisation, range of practice and within the region in which he or she is registered. This regulation also applies to doctors of Western medicine.

Those who have completed an apprenticeship of at least three years or who have practiced traditional Chinese medicine (or one of its forms) over a long period of time are required to pass an examination in order to be allowed to continue to practise.

As a consequence of the new legislation, which regulates licensing more strictly, the number of traditional Chinese medicine practitioners allowed to practise has decreased. Practising without registration is illegal and subject to penalties. There is no information as to whether unlicensed practitioners have continued to practise.

Under the Act, doctors practising traditional and Western medicine are regulated in the same way. The Act specifies their responsibilities, code of conduct, ethics and legal responsibilities, which are the same for both kinds of practitioners. In cases of misconduct and violation of the law, practitioners may receive a warning or their licences may be suspended for between six months and a year. Serious offences may be referred to the judicial system and penalties applied accordingly.

Summary

Traditional and Western medicine are highly integrated in the Chinese health care system. The Practitioner Act of the People's Republic of China strictly regulates the qualification standards and practice of traditional Chinese medicine practitioners. Most of the regulation of practice applies to both Western and traditional Chinese medicine. The objective of the Act is to ensure patient safety and to regulate the conduct of the medical profession. The Act has also meant that many traditional Chinese medicine practitioners with a conventional apprenticeship education are no longer able to practice legally.

Germany

Statistics

In 2002, 56 per cent of the German population reported having used a form of complementary medicine during the previous year (Institut für Demoskopie Allensbach 2002). Naturopathy (including phytotherapy), homeopathy, acupuncture, autogenic training, nutritional therapies and chiropractic are the most commonly used complementary therapies (Dixon *et al* 2003; WHO 2005b).

There is lack of consistency in the reported utilisation statistics among various surveys; however, a survey by Marstedt (2002) on general attitudes towards health and health care reported that two-thirds of all respondents had been exposed to complementary medicine at least once in their life. Differences between West and East Germany persist, with higher utilisation rates in the Western part of the country. There are trends towards increasing use of natural remedies and towards convergence of utilisation rates between age, gender and social groups (Dixon *et al* 2003).

Complementary medicine providers comprise medical doctors and registered complementary medicine specialists/healing practitioners (*Heilpraktiker*). It is illegal to practice therapeutic complementary medicine without registration: the practice of preventive complementary therapies is, however, permitted. As an exception to this rule, midwives are permitted to practise independently within the bounds of their profession. A doctor must be responsible for any complementary medicine practised by nursing staff.

Studies show a rising trend in the number of complementary medicine qualifications among medical doctors over the last decade. In 2004, out of the approximately 300,000 doctors (one per 275 inhabitants; WHO 2005b), 14,663 were additionally qualified in chiropractic, 11,973 in naturopathy, 4,922 in homeopathy and 4,827 in physical therapy (Bundesärztekammer 2005, personal communication). However, many medical specialists use complementary medicine without an additional qualification. The proportion of office-based doctors with a complementary medicine qualification is four times higher than that of hospital-based doctors with such qualifications (12 per cent) (Dixon *et al* 2003). There are no data available on the number of other health care professionals providing complementary medicine.

Over 20,000 *Heilpraktiker* are members of the six leading *Heilpraktiker* associations, representing about 90 per cent of all *Heilpraktiker* (Fachverband Deutscher *Heilpraktiker* 2005). Although the *Heilpraktiker* seem to be less centrally organised when compared to the medical profession, they play a role as a self-regulatory body within the health care system. However, membership of an association is voluntary and anyone who has passed the examination and is over 25 years of age is allowed to practise as *Heilpraktiker*.

Reimbursement

In the past, reimbursement levels were comparatively high in Germany, which might partly have been due to the fact that many complementary therapies such as chiropractic and naturopathy have been well integrated into conventional medicine. In a 2002 survey, 60 per cent of the respondents paid out of pocket for natural remedies (Institut für Demoskopie Allensbach 2002). According to Marstedt (2002), 43 per cent of

complementary medicine users had received a prescription from a practitioner, which was reimbursable by their sickness fund, while 57 per cent paid out of pocket. However, as all over-the-counter drugs were delisted in 2004, most herbal remedies are now excluded from reimbursement (Kaesbach and Nahnauer 2004).

For most complementary therapies, patients pay out of pocket unless they have additional private insurance covering complementary therapies. In general, reimbursement for complementary therapies by a statutory sickness fund is limited by legal constraints. Until recently, such treatments were reimbursed only in the context of special model projects (WHO 2005b).

However, the hurdles have been lowered by a recent decision of the Federal Social Court (B 1 A 1/103 R, 2005). The decision allows sickness funds to extend reimbursement to more forms of complementary medicine, particularly naturopathy and homeopathy. Sickness funds reimburse visits only to a doctor, not to a *Heilpraktiker* – the exception being partial reimbursement of some *Heilpraktiker* costs by ‘Beihilfe’, a state-run financial assistance scheme for public officials such as teachers and policemen. Doctors practicing complementary medicine must hold a special qualification in order to be eligible for reimbursement (WHO 2005b). Many private insurance plans cover visits to a *Heilpraktiker*. Complementary insurance packages may offer coverage for naturopathy, including *Heilpraktiker* treatment.

Acupuncture, as one of the most accepted complementary therapies, can be fully or partly reimbursed by some sickness funds, though the patient has to apply to the fund explaining the specific diagnosis and demonstrating prior effectiveness of acupuncture in his or her particular case. Some private insurance funds include coverage for acupuncture (Deutsche Ärztesgesellschaft für Akupunktur 2005).

Overview of regulations

EDUCATION AND LICENSING

Regulation of complementary medicine education, training and practice varies as there are different professions offering such therapies. In most cases doctors receive their complementary medicine training during their medical education or as a special qualification after completing their specialisation. *Heilpraktiker* are regulated by the state under the supervision of the public health authorities of the federal states. Although some certification systems have been established in recent years, these are voluntary for the most part and little is legally codified with regard to the education and qualifications of *Heilpraktiker*.

Medical doctors

In order to obtain a licence to practise medicine, a doctor must have an academic degree in medicine (usually a six-year course), practical experience, a licence from public authorities and a medical certificate confirming that he or she has no physical or mental illnesses, including drug abuse (Dixon *et al* 2003). Until recently, naturopathy was part of the curriculum in only 12 of the 35 German medical faculties, though all students had to answer a couple of questions on naturopathy in their final examinations (WHO 2005b). Under the Medical Probationers’ Ordinance (Approbationsordnung) passed by parliament in 2003, medical faculties are now obliged to include training in naturopathy and physical therapy in their curriculum (Dobos and Michaelsen 2002). However, there has been criticism of the short duration of compulsory training units (14 hours of seminars and 28 hours of lectures in two semesters) (Michalsen, communication).

Doctors can acquire various qualifications in complementary medicine (Zusatzbezeichnungen), and requirements for these vary. However, there is always a mandatory period of practice in that specific area and an official catalogue of procedures and skills to be learned during this time (Dixon *et al* 2003). The specific requirements at regional level are regulated in the Code of Training of the Medical Associations, based on a draft provided by the Federal Medical Association (Muster-Weiterbildungsverordnung), particularly for acupuncture, allergology, naturopathy, physical therapy, balneology and special pain therapy. In the case of naturopathy, this includes either six months of training in a hospital specialising in complementary medicine or three months in a practice under the supervision of an office-based doctor with complementary medicine specialisation plus an additional 160 hours of seminars (Bundesärztekammer 2005).

There is debate as to whether the period of training is sufficient for doctors to specialise in a form of complementary medicine. The universities in Munich, Essen and Witten currently plan to introduce Master programmes to increase training standards for doctors (Michaelsen, communication).

Heilpraktiker

The position of *Heilpraktiker* in Germany is unique compared to other countries. The *Heilpraktiker* profession is regulated by the state on the basis of the *Heilpraktikergesetz*, which was introduced in 1939 and modified in 1974, 1997 and 2000.

There is very little in the way of formal requirements for *Heilpraktiker*. In order to qualify for a licence, the applicant must have completed primary (basic school-level) education, must be at least 25 years of age, and must provide a clearance certificate and a medical certificate confirming that there is no indication of a physical or mental health problem or of drug abuse that would limit the applicant's suitability to perform complementary medicine.

No formal proof of qualification is needed, but applicants are required to pass a written and an oral examination at a local public health office (which operates under the supervision of the respective federal state). Applicants must prove that they have sufficient knowledge and abilities to practise as *Heilpraktiker*. In legal terms this mainly means they have to show that their treatment does not negatively affect public health and that they know the legal limits to their practice (WHO 2001). Candidates are tested on basic clinical knowledge and skills, biomedical understanding of the body and legal regulation of their profession. In addition, they have to be able to recognise and interpret any sign of potentially serious diseases, infectious diseases and other conditions, which they are not allowed to treat. Although there are no formal educational requirements, there is an average of three years' training prior to passage of the *Heilpraktiker* examinations. Examination regulations are stringent, and 60–90 per cent of applicants fail.

The 'legal duty of care' that applies to doctors also applies to *Heilpraktiker* in Germany, and the *Heilpraktiker* licence can be withdrawn if there are concerns over patient safety. Thus, *Heilpraktiker* practising complementary medicine must be sufficiently trained to avert any possible harm to the patient, and insufficiently qualified practitioners run a considerable legal risk. According to WHO estimates (2001), only 10 per cent of all *Heilpraktiker* have not received any formal training in complementary medicine.

In recent years, *Heilpraktiker* have established voluntary systems for independent quality assurance. For example, the German *Heilpraktiker* Association (Die Deutschen

Heilpraktikerverbände) is an umbrella organisation comprising seven of the large *Heilpraktiker* professional associations, which assures the educational requirements for acupuncture, naturopathy and homeopathy. The Foundation for a Certificate in Homeopathy (Stiftung Homöopathie-Zertifikat) also provides educational accreditation of homeopathy schools, certification of final examinations and ongoing medical education for supervisors and teachers.

Other health care professionals

There is little information available on the complementary medicine educational requirements for other health care professionals. However, provision of complementary medicine is assumed to be widespread, particularly among paramedical professions such as nurses and midwives as well as physiotherapists (Dixon *et al* 2003).

Professionals practising complementary medicine (other than doctors) may not make a diagnosis and may not treat or relieve any disease or ailment or physical damage. Thus, they are limited to preventive care unless they are working under the supervision of, or at the request of, a medical doctor. Midwives are the exception, and may practise independently. Other practitioners such as nurses, physiotherapists and masseurs must have a referral from a doctor in order to receive reimbursement for their services. Nurses are not allowed to practise complementary medicine without the permission of the institution in which they work. According to WHO (2005b), there are no compulsory training requirements for nurses and midwives, but voluntary training courses are available.

PRACTICE

Medical doctors

In Germany, the code of conduct of the Medical Association regulates doctors. The Federal Medical Association (Bundesärztekammer) is a self-regulating organisation providing guidelines for the code of conduct, which is translated into regulation by the Medical Associations of the 16 federal states. Regulations are legally binding for every doctor practising within this area. Between the states, the codes of conduct may slightly vary. The code regulates practice, professional discretion, training, advertising, ethics and professional behaviour, as well as co-operation with other health-related professions. There is no regulation specifically for the practice of complementary medicine.

Doctors are allowed to use a complementary medicine title (for example, ‘acupuncturist’ or ‘homeopathic doctor’) only if they hold the respective qualification. However, there are no legal limits to doctors offering any form of complementary medicine without qualification. Doctors are generally liable for their actions and may be sued for malpractice by the patient. The Chamber of Doctors (Ärztekammer), the self-regulatory organisation of the doctors, may seek legal action against a doctor in the rare case of suspicion of severe malpractice.

Heilpraktiker

In addition to complementary medicine treatment, *Heilpraktiker* can offer a variety of basic medical services such as blood sugar tests and electrocardiograms. However, they are legally prohibited from providing any service that is defined as requiring a doctor or another health-related professional (as defined in the *Heilpraktikergesetz*), in order to protect patients against fraud, malpractice and misleading information. Provision of complementary therapy by *Heilpraktiker* is unregulated, but it is supervised by the local

public health office and must comply with the general standards of good professional practice (Dixon *et al* 2003). Members of *Heilpraktiker* associations agree to abide by the code of conduct and ethical codes of their associations.

Summary

Germany has a long history of naturopathy and other alternative medicine specialties. The majority of the population uses some form of complementary medicine. Doctors, *Heilpraktiker* and other health-related professionals offer complementary therapies. Regulation for training, licensing and practice is in place, but is inconsistent, in particular with regard to *Heilpraktiker*. Regulation may be sufficient to protect the public against malpractice but may fall short of achieving a high quality of care. Professionals practising complementary medicine other than doctors and *Heilpraktiker* are not subjected to regulation; however, they are prohibited from diagnosing and treating patients, and their field is limited to that of practising preventive care.

Ghana

Background

In Ghana, traditional medicine constitutes a major part of health care provision. Knowledge and skills of traditional medicine are deeply embedded in local culture and beliefs are handed down through generations.

The main types of traditional medicine practitioners in Ghana are herbalists (65.5 per cent), traditional birth attendants (16.6 per cent), soothsayers/diviners and priest-healers (percentages for the regions of Asanti, Central, Greater Accra and Western Regions; WHO 2005b). Herbalists use herbs and plants as therapeutic agents on the basis of traditional knowledge. Traditional birth attendants are usually female practitioners who assist at childbirth; they also often provide antenatal and postnatal care and treat maternal and childhood illnesses. Soothsayers or diviners are mainly leaders of revival sectarian and African-based syncretic churches; they may not use herbs but believe in supernatural powers for therapeutic purposes. Priest-healers are believed to act as mediums for deities and may diagnose through divination; they may have knowledge of herbs but may attribute the healing virtues of plants to a supernatural presence in the plants. There are other sub-specialists in herbalism, bone setting (orthopedic surgery) and circumcisers.

More recently, neo-herbalists started to operate herbal clinics following concepts of orthodox medical set-ups (Mensah 2005). Another recent phenomenon is the provision of other forms of complementary medicine, such as homeopathy, chiropractic, hydrotherapy, acupuncture and naturopathy, which are mainly practised in urban areas and are of minor importance (WHO 2005b).

Statistics

Historically, traditional medicine was the only form of treatment available in Ghana. Even today, about 70 per cent of the population depends almost entirely on traditional medicine. It has been estimated that there is on average approximately one traditional medicine practitioner for every 400 people, compared to one conventional doctor for every 12,000 people (WHO 2001).

According to a Ministry of Health census in 2002, there were 1,115 medical doctors (40 per cent of whom worked at the two teaching hospitals) compared to 11,291 traditional practitioners (WHO 2005b). Most traditional practitioners, however, are not registered, and their numbers are estimated to exceed 100,000. Services of traditional medicine practitioners are uniformly available in all regions of Ghana, and they are considered to be the backbone of the health care delivery system, particularly in rural areas (Mensah and Sarpong 1995; Niagia 2002).

Reimbursement

According to WHO (2005b), more than 50 per cent of health care expenditure is paid out of pocket by patients. As traditional medicine is not considered a mainstream health service, its provision is not publicly financed by government. There is no information as to whether traditional medicine will be integrated into the planned national health insurance scheme (WHO 2005b).

Legislation and organisations

There are a number of associations of traditional medicine practitioners, such as the Ghana Herbal Manufacturers and Clinicians Association and Ghana Psychic and Traditional Medicine Practitioners Association, which was inaugurated in June 1962 (Oppong-Boachie 1999). In 1999, the government brought all traditional medicine associations under one umbrella – the Ghana Federation of Traditional Medicine Practitioners Association (Mensah 2005). However, all traditional practitioners have not become members of an association. Although the government co-operated with the Ghana Psychic and Traditional Medicine Practitioners Association, which maintained records of registered practitioners, registration has been voluntary and there was little enforcement of regulation.

In 2000, the government introduced the Traditional Medicine Practice Act 575 (2000). Its main objective is to make traditional health care a well-defined and recognised system that provides an acceptable quality of care and contributes to the improvement of the health status of the people (WHO 2005b).

As part of the process to create a policy framework for the development and promotion of traditional medicine, a consensus-building symposium was held in 1995 as a follow-up to the National Policy Framework on Traditional Medicine Plan drafted in 1994. This process eventually led in 2000 to the enactment of the Traditional Medicine Practice Act, which was developed in 1999 with the active participation of traditional medicine practitioners. The Act seeks to establish a Traditional and Alternative Medicine Council, its main responsibility being to oversee and regulate the practice of traditional medicine, register and license practitioners and, in collaboration with the Food and Drugs Board, oversee the preparation and sale of herbal medicines. Although this law was passed in 2000, the Council has yet to be established (Mensah 2005) and there is no information available on when this may happen.

However, some administrative functions have been transferred to the Traditional and Alternative Medicine Directorate of the Ministry of Health. This body serves as the administrative and policy-making body of the government to oversee traditional and alternative medicine practices and to develop policy guidelines.

In collaboration with the Ghana Federation of Traditional Medicine Practitioners Association and other stakeholders, the Directorate developed a five-year strategic plan for traditional medicine, which outlined activities to be carried out from 2000 to 2004. Activities have included the compilation of the second volume of the *Ghana Herbal Pharmacopoeia* and the integration of traditional medicine into the official public health system, as well as measures to improve the safety and effectiveness of traditional medical products. It also proposed the development of a comprehensive training programme in traditional medicine from basic to tertiary levels (for example, apprenticeship, secondary education, university).

Due to the rising interest in traditional medicine, the Directorate has recently increased its efforts to assure the benefits of traditional medicine. It has developed a code of ethics, training manuals for herbalists and other documents geared towards the improvement of standards of practice and the assessment of standards for the quality of herbal medicines. The Centre for Scientific Research into Plant Medicine at Mampong-Akuapem plays an important role in the research and standardisation of traditional medicine. It was established in 1975 with the mandate to conduct scientific research into plant medicine.

The Centre currently serves as both a research centre and a hospital providing both traditional and conventional medical care (Mensah 2005). It has recently been recognised as a collaborating centre of WHO.

Regulation of education

According to WHO (2001), training by apprenticeship is required, accepted and promoted for practitioners of traditional medicine. As the Act has not yet been implemented, comprehensive official standards for education are absent. Although there are training programmes to upgrade the knowledge of traditional birth attendants, these programmes are not compulsory.

In order to increase the standards of education for herbal practitioners, the Directorate introduced a Bachelor of Science programme in herbal medicine. Since 2001, this course has been jointly run by the Faculty of Pharmacy and the School of Medical Sciences with the collaboration of the Faculties of Science and Social Science of Kwame Nkrumah University of Science and Technology. The programme aims at integrating traditional herbal knowledge into a scientifically oriented curriculum (Mensah 2005).

According to Mensah (2005), the Ministry of Health and the University are currently discussing how to integrate newly trained practitioners into the health care system. Several options are considered, such as the integration of formally educated herbalists into existing health care institutions or the establishment of specialised clinics following the model of the Centre for Scientific Research into Plant Medicine (Mensah 2005).

Summary

In the absence of comprehensive medical care, traditional medicine is the only accessible treatment option for most of Ghana's population. In recent years, the government started to acknowledge the potential of traditional practitioners and introduced legislation to increase standards of education and practice. However, this legislation has not been fully implemented and standards are yet to be fully developed.

Hong Kong Special Administrative Region

Background

Traditional Chinese medicine is an integral part of Chinese culture, playing a significant role in disease prevention and treatment, as well as in health maintenance. Being a predominately Chinese society, Hong Kong has a long tradition of using traditional Chinese medicine. Throughout its more than 150-year history as a British colony, traditional Chinese medicine was not considered part of the subsidised public health care system. Despite its popularity among the Chinese communities for centuries, it existed as an unregulated alternative medicine. In Hong Kong, the title 'Chinese medicine practitioner' is applied to members of a diverse group of practitioners engaging mainly in general practice, bone setting and acupuncture. Hong Kong is also an important consumption and retail centre of Chinese herbal medicines imported from mainland China and other territories.

Statistics

Survey results found that more than 60 per cent of Hong Kong citizens had consulted a traditional Chinese medicine practitioner (Hong Kong Government 1994). In a 2001 survey conducted after the regulatory measures for such practitioners were implemented, 70 per cent of respondents expressed confidence in using these services.

Before regulations were introduced, there were 7,000 traditional Chinese medicine practitioners, of whom almost half had acquired their clinical experience through apprenticeship. The Enrolment of Chinese Medicine Practitioners in Hong Kong survey, conducted by the Preparatory Committee on Chinese Medicine in 1995–96, found that 3,385 out of 6,890 traditional Chinese medicine practitioners were trained by a relative or 'master'. As at 30 September 2006, there was a total of about 5,300 'registered' traditional Chinese medicine practitioners and 2,900 'listed' practitioners in Hong Kong (see below for explanation).

In 1994, there were 5,860 institutions involved in the trade of Chinese medicine, employing about 27,000 people. The population of Hong Kong consumed HK\$600 million of herbal medicine in 1998.

Extent of integration with conventional medicine

In Hong Kong, traditional Chinese medicine operates outside the public health care system rather than as an integral part of it. The public health care system, which is heavily subsidised by general taxation, is dominated by Western medicine and there are no well-established channels for referral between Chinese and Western medicine. Despite support for integration among some academics and politicians (Lee 1978; Lee 1981; Leong 1996), the government has not given support for these views. A long-term strategy to integrate traditional Chinese medicine into the existing health care system is not yet in place.

The government committed to establish 18 outpatient Chinese medicine clinics in public hospitals in 2005 but progress is far behind schedule. At present, there is no plan to build any traditional Chinese medicine hospitals in Hong Kong, though some effort has been made to support clinical research in selected public hospitals and Chinese medicine research centres.

For the majority of users of traditional Chinese medicine, the full costs have to be met out of pocket. There is almost no public provision and few public subsidies for patients attending these outpatient clinics. Only patients who are recipients of government financial assistance receive some subsidy. Some elderly patients can obtain a discount if a charitable fund is available. Furthermore, many insurance companies accept medical claims on only a limited number of Chinese medicine treatments and procedures, such as acupuncture and bone setting.

Overview of regulations

In 1989, a Working Party on Chinese Medicine was set up by the colonial Hong Kong Government in order to prepare regulations for traditional Chinese medicine. The process was accelerated after Hong Kong reverted to China in 1997. The Basic Laws Article 138 provided a legal mandate for the government of the Hong Kong Special Administrative Region to develop Chinese medicine alongside Western medicine. There was strong political support from the Hong Kong Special Administrative Region government and a belief that Hong Kong had the potential to develop into an international centre for traditional medicine. Regulation was seen as part of the process of modernising Chinese medicine and a gradual move towards professionalisation of its practitioners.

Until 1999 anyone with a business license could provide traditional Chinese medicine services in Hong Kong. Consequently, the standards of practice varied, patients' records were not properly kept, and evidence-based practice was generally lacking.

REGULATION AND LICENSING

Unlike practitioners of Western medicine, until 1999 traditional Chinese medicine practitioners were not required to register and formal training was not a prerequisite. The system relied on self-regulation by the practitioners themselves and there was a disparity in terms of standards and quality. There were at least 47 traditional Chinese medicine associations and chambers of commerce of Chinese medicine in Hong Kong, varying in history and size of membership (Preparatory Committee on Chinese Medicine 1999). Half of these associations had been established for less than ten years.

In response to the recommendations of the Working Party on Chinese Medicine, the Preparatory Committee on Chinese Medicine was appointed in 1995 to make recommendations on the establishment of a statutory body and a regulatory framework for traditional Chinese medicine.

The Chinese Medicine Ordinance (Cap 549 of the Laws of Hong Kong), enacted in July 1999, provided a legal mandate for setting up the Chinese Medicine Council of Hong Kong. It saw its mission as to protect public health and patients' rights and safeguard professional standards, as well as to promote self-regulation among the traditional Chinese medicine profession. The Chinese Medicine Council was made up of representatives of traditional Chinese medicine practitioners, Chinese medicines traders, academics, lay members and government officials. There are two boards under the Council: the Chinese Medicine Practitioners Board and the Chinese Medicines Board. The former is responsible for developing and implementing the regulatory system for traditional Chinese medicine practitioners, which includes registration, examination, discipline, and continuous professional education (Chinese Medicine Council of Hong Kong 1999–2002); the latter is responsible for the regulation of Chinese medicines, which includes licensing and regulation of Chinese medicines traders and registration of proprietary Chinese medicines.

A series of transitional arrangements was put in place to allow practitioners with different training backgrounds to register. Anyone practising traditional Chinese medicine on or before 3 January 2000 could apply to become a listed Chinese medicine practitioner. Depending on their academic qualifications and the number of years of experience, applicants were classified into five categories. Some were able to register directly; others had to undergo a registration assessment or take a licensing examination. For example, those with more than 15 years of practical experience were allowed to register directly even without any formal qualification, while those who had practised for less than ten years with no acceptable qualification were required to take the licensing examination.

Another category of limited registration was established to allow approved education and research institutes to employ traditional Chinese medicine experts who were not registered to practise in Hong Kong (Chinese Medical Council of Hong Kong 2003).

The registration of Chinese medicine practitioners was implemented expediently and smoothly. The listing of Chinese medicine practitioners was announced in 2001 and the assessment of alternative qualification requirements was completed in 2002. Among the 7,707 listed Chinese medicine practitioners, about one-third of them (2,384) were able to register directly while the rest had to undertake the registration assessment or the licensing examination (Chinese Medical Council of Hong Kong 1999–2002). As at 30 September 2006, 92 per cent (5,262) of registered practitioners were listed practitioners who gained registration under the transitional arrangements. Only about 11 per cent (594) of them became registered practitioners by examination.

Unlike sick leave certificates issued by Western medical practitioners, those issued by registered Chinese medicine practitioners were not initially recognised under the labour legislation. However, the Hong Kong government amended the labour legislation in mid-2006 to recognise these sick leave certificates and the legislation, scheduled for partial commencement in December 2006, further consolidates the professional status of registered Chinese medicine practitioners. It also gives employers and the general public the right to choose between Western and Chinese medical practitioners.

To ensure the quality, efficacy, and safety of proprietary Chinese medicines in Hong Kong, subsidiary legislations were passed by the Legislative Council on the manufacture, sale and use of Chinese medicines. The licensing of Chinese medicine traders and the registration of proprietary Chinese medicines was launched in 2003.

EDUCATION AND TRAINING

Before 1997, more than 55 training courses were organised by schools of continuing studies in three local universities and 13 colleges in Hong Kong (Preparatory Committee on Chinese Medicine 1997). Since 1998, local universities have been keen to offer full-time degree programmes in traditional Chinese medicine. Research centres and teaching clinics were established to conduct scientific and evidence-based research. All graduates from an undergraduate degree course in traditional Chinese medicine or its equivalent have to go through a licensing examination before they can become registered practitioners. Before practice, a traditional Chinese medicine practitioner must obtain a practising certificate, which is valid for three years and is renewable upon satisfying the requirements (60 hours in three years) of continuous professional education stipulated by the Chinese Medical Council of Hong Kong. About a quarter of traditional Chinese medicine professional bodies are certified to offer continuous professional education programmes to registered Chinese medicine practitioners.

The registration assessment was conducted by experienced practitioners in the field. The purpose was to evaluate the basic professional knowledge and skills of listed Chinese medicine practitioners for the purpose of formal registration. The registration assessment exercise for listed practitioners was completed in 2002, with a pass rate of 83 per cent (Chinese Medical Council of Hong Kong 2003).

Licensing examinations were conducted annually from 2003 to 2006. The written examination covers 20 subjects (which were regrouped into 13 subjects in 2007) on a wide range of topics including the health care system, fundamental traditional Chinese medicine theories, and different specialties in traditional Chinese medicine (Chinese Medical Council of Hong Kong 2008). Candidates are allowed to undertake the clinical examination only if they pass the written examination.

Among the candidates, the percentage pass rates for the written examinations were 47, 27, 36 and 52 for 2003, 2004, 2005 and 2006 respectively. The passing rates for the clinical examinations were much higher, ranging from 83 per cent in 2003 to 68 per cent in 2006.

Summary

Traditional Chinese medicine was an unregulated parallel system of health care in the private sector in Hong Kong until 1999, when regulations were introduced to regulate its medicines and practitioners. Transitional registering arrangements allowed practitioners who were already in practice before March 2000 to have their prior qualifications and experience accredited or to take a qualifying examination. The process of implementation has proceeded quickly and efficiently so that currently there are some 5,000 registered practitioners. The Chinese Medicine Practitioners Board has not restricted the number of attempts at the licensing examination. Listed Chinese medicine practitioners may continue to practise without registration until a date to be decided by the Hong Kong Administration. Despite the introduction of regulation, traditional Chinese medicine continues to operate largely in the private sector in parallel with the public health system. There are some discussions about greater integration in future.

Background

There are a number of traditional and complementary therapies practised widely in India including Ayurveda, homeopathy, unani, siddha, yoga and naturopathy. Most people who use alternative medicines do so alongside conventional medicines (Shafiq *et al* 2003). Alternative medicine is particularly popular in rural and semi-urban areas and utilisation is higher in these areas than in the cities (Srinivasan 1995; Gogtay *et al* 2002). During colonialism, biomedicine sidelined the traditional practice of Ayurveda. The Bhole Committee, which was set up by the British Indian Government in 1943 and which played a significant role in drafting national health policies, overlooked integration of traditional medicine into the newly established health care system (Jeffery 1982; Srinivasan 1995; Banerjee 2002). Increasing international interest in complementary medicine in recent years has resulted in renewed interest in traditional medicine. The Indian government has established a strategy to strengthen traditional health practices and all complementary therapies.

In 1995, the Ministry of Health and Family Welfare established the Department of Indian Systems of Medicine and Homoeopathy, which was renamed in 2003 as the Department of Ayurveda, Yoga and Naturopathy, Unani, Siddha and Homoeopathy (AYUSH – meaning ‘long life’). The responsibilities of the Department include the formulation of policy, the development of educational and research institutes, drug development programmes and the integration of various systems in the health care delivery system as well as the drafting and implementation of programmes.

Statistics

At present, there are 438,721 registered medical practitioners practising Ayurveda as well as 15,193 dispensaries and 753 hospitals (with a cumulative bed strength of 20,533) for Ayurvedic medicine. The figures for homeopathy are 217,460 practitioners, 5,634 dispensaries and 223 hospitals (11,205 beds). Government figures in 2005 reported that there were 43,578 and 17,560 unani and siddha practitioners respectively. It is estimated that approximately 70 per cent of the population relies on traditional medicine to meet primary health care needs (Lavekar and Sharma 2005).

Traditional medicine is delivered in a range of provider settings. The larger hospitals are mostly owned by the government, while smaller practices are privately run. In 1999, India spent 0.9 per cent of its gross domestic product on health, of which only 2–4 per cent was spent on alternative medicine (Srinivasan 1995; AYUSH 2002). There has, however, been a recent thrust to increase the spending by 10 per cent through the Grant in Aid programme of the Department of AYUSH (GOI 2005).

Overview of regulations

In 2002, for the first time, a National Health Policy on the Indian Systems of Medicine and Homoeopathy was drafted.

In order to streamline policies and guidelines, the government brought together all previous rules and regulations and all medical systems under one regulatory umbrella, and created separate committees responsible for education, research and development. The

Indian Union consists of several state governments and a Union Government. The Union Government is responsible for laying down standards of education and drug development and encourages research, while the state governments are responsible for health care delivery. Directorates have been created in 18 states to administer the traditional and complementary medicine sector throughout the country.

EDUCATION AND TRAINING

The Indian government established regulatory bodies to standardise education for traditional and complementary medicine practitioners:

- the Central Council of Indian Medicine in 1970 for Ayurveda, unani and siddha
- the Central Council of Homoeopathy in 1973 for homoeopathy.

These councils are responsible for setting and ensuring the minimum standards of education, maintaining the central register of practitioners and regulating professional practice. The Central Council of Indian Medicine awards a five-and-a-half-year Bachelor degree in Ayurvedic medicine and three-year postgraduate MD in 22 specialties of Ayurvedic medicine. Courses for the PhD degree in Ayurveda, and five-year Bachelor degrees in siddha and unani medicine are also offered. Many states also offer Ayurveda nursing and pharmacy courses of varying duration. The Central Council of Homoeopathy awards a five-and-a-half-year Bachelor degree and a three-year postgraduate MD (Homoeopathy) in seven specialties of homeopathic medicine. Admission to these programmes is based on merit and standards are prescribed by the Councils. However, there is no uniform admission procedure.

The Councils are responsible for the content of the curricula and set minimum standards for the infrastructure and manpower required for undergraduate and postgraduate teaching institutions. They are also responsible for recommending to the central government or university that any colleges and institutions failing to maintain standards should not be reaccredited. In 2005, there were 219 Ayurvedic, 178 homeopathic, 37 unani and 8 siddha medical colleges.

PRACTICE

The Central Council of Indian Medicine and Central Council of Homoeopathy maintain registers of practitioners and set guidelines of professional conduct, etiquette and the code of ethics to be observed by the practitioners. Graduates from accredited colleges were automatically registered; however, older practitioners who were practising for many years before the registration system was put into practice were given the opportunity to register. However, a range of traditional practitioners are not yet covered by the Councils.

It is illegal for traditional and complementary medicine practitioners to prescribe allopathic medicines, though it is not uncommon for this to happen. There are many reasons why infringements occur, including the dominance of biomedicine in the educational curricula and the unwillingness of traditional and complementary medicine practitioners to restrict their practice to only traditional medicine (Wujastyk 2004). Practitioners also face allegations by their allopathic colleagues that their practice of medicine is unscientific (Banerji 1979; Srinivasan 1995). In recognition of the need for acceptance by the orthodox scientific community, Pharmacopoeia Committees for Ayurveda and Homeopathy, Central Research Councils, and drug testing laboratories have been set up in order to undertake research into the scientific basis for respective systems (GOI 2005).

The government has proposed in recent policy documents that Indian systems of medicine be integrated into conventional medicine. In fact, it is mandatory for a traditional/complementary medicine practitioner to be present in all community health centres, and it is proposed that this be extended to other levels within the health system (AYUSH 2002; AYUSH 2003). The rationale for this decision is that patients receive the best available treatment. Under the National Rural Health Mission being implemented by the Ministry of Health and Family Welfare, the mainstreaming of AYUSH systems of medicine with conventional medical care is envisaged.

The Department has also introduced reorientation programmes and an additional component of continuing medical education for practitioners of traditional medicine as the medical systems become more integrated. Continuing training is not yet mandatory but would ensure that practitioners working in the private and public sector keep up to date (GOI 2005).

Information enhancing policies

The website for the AYUSH department (<http://indianmedicine.nic.in>) gives detailed information about the different alternative medical systems, the availability of services and personnel and the safety and efficacy of treatments. It also provides lists of institutions and manufacturers of herbal medicines. The government engages with non-governmental organisations at different levels and organises road shows and 'melas' for women, youth and farmer co-operatives in order to educate the public about alternative medicine. For this purpose, it has produced and broadcast documentaries on national television in different regional languages.

Furthermore, the government has introduced policies to promote Indian traditional medicine abroad through participation in international fairs and conferences and through extending educational opportunities (AYUSH 2005). The government has also initiated the creation of a teaching module that can be integrated into the curriculum taught at conventional medical and nursing colleges (AYUSH 2003).

The Council of Scientific and Industrial Research and the Department of AYUSH are jointly digitising Ayurvedic, siddha and unani medicinal knowledge and translating the information into English, Spanish, German, French and Japanese to promote Ayurveda and also to forestall contentious patent applications (Padma 2005). Information on the Drug and Magic Remedies Act of 1954 (targeting objectionable advertisement) and its legal provisions for maintaining quality control for Ayurveda, siddha, unani and homeopathy drugs is disseminated effectively (GOI 2005).

Summary

The government of India has streamlined and expanded existing policies aimed at the promotion and regulation of traditional and complementary medicine practice. The complex and diverse nature of the Indian medical system still presents many challenges for regulators. The impact of policies on the quality and level of integration of traditional and complementary medicine services and on public health in India is yet to be seen.

Background

Traditional Japanese herbal medicine (kampo), a modified version of Chinese herbal medicine, has developed over more than 2,000 years, providing a unique set of pharmaceutical formulae based on herbs and plants (Matsumoto and Inoue 2000). Under the Medical Care Law of 1874, traditional Japanese medicine was abrogated and almost completely replaced by Western medicine, including some influences of Western herbal medicine (mainly from Germany and The Netherlands). Since the 1960s, traditional Japanese medicine has experienced a steady comeback. However, it has been noted that there is still little systematic research into or education about traditional medicine (Saito 2000).

According to Suzuki (2004), Japanese complementary therapies include kampo, acupuncture, moxibustion and massage – including finger pressure (shiatsu) – as well as dietary supplements, anti-aging medicine (for example, growth hormone treatment), lifestyle drugs (for example, remedies for alopecia, obesity or impotence), environmental medicine (for example, functional food to absorb dioxins from traffic pollution), judo orthopedy and some forms of advanced medical treatment such as immunotherapy for the treatment of cancer.

Statistics

According to one study, 65.6 per cent of all Japanese adults use complementary medicine (Kamohara 2002). In a telephone survey, of 1,000 Japanese respondents 76 per cent said they had used at least one type of complementary medicine within the last 12 months, more than the number reporting use of conventional Western medicine (65.6 per cent) (Yamashita *et al* 2002).

Although many forms of complementary medicine are practised by medical doctors, acupuncturists and moxibustion specialists mainly perform acupuncture, electro acupuncture and moxibustion. In 2001, 113,000 practitioners of acupuncture and moxibustion were registered (WHO 2005b).

Judo orthopedics is a separate paramedical profession using an orthopedic technique that was developed as a consequence of frequent joint dislocations among judo wrestlers. In 1999, there were approximately 29,000 judo therapists registered in Japan (WHO 2005b).

In 1998, 69,236 acupuncturists, 67,746 moxibustion practitioners, 94,655 massage practitioners and 26,087 judo therapists were officially registered, compared with 268,611 regular doctors (WHO 2001).

Reimbursement

In 2000, national health insurance fully or partly covered acupuncture, moxibustion, Japanese traditional massage and judo therapy as well as 147 prescription kampo formulae and 192 herbal materials (WHO 2001). Other manual therapies were covered only when approved by a medical doctor (WHO 2005b).

Extent of integration with conventional medicine

Kampo in particular seems to co-exist in harmony with modern Western medicine. Almost all medical doctors believe in the effectiveness of kampo (Watanabe *et al* 2001). In a survey by Imanishi *et al* (1999), 70 per cent out of 267 physicians prescribed kampo alongside conventional medicine; 8 per cent of physicians offered other complementary therapies such as chiropractic, aromatherapy, homeopathy, health spa therapy, Ayurveda, hypnosis, flower therapy, thalassotherapy, qigong, yoga, dietary therapy, imagery, meditation, art therapy and prayer (Suzuki 2004). However, 82 per cent of oncologists believe that complementary medicine products were ineffective against cancer (Hyodo *et al* 2003).

Overview of regulations

According to Suzuki (2004), the Japanese government has recognised most complementary therapies as legitimate medical practice, but has been slow to introduce critical standards and to provide appropriate training. This will change as complementary medicine is rapidly entering into mainstream medicine in Japan due to increasing consumer demand. However, Suzuki suggests that there is still a lack of research and information in Japan about the efficacy and safety of complementary medicine and regulation is not systematic.

PRACTICE

Medical doctors

Under the Medical Practitioners Law 201 of 1948, only registered orthodox doctors are allowed to practise and prescribe medicine, including kampo, and they are able to provide any form of alternative treatment. Only recently have professional organisations started to introduce systems for the registration of physicians practising complementary medicine. In 1990, the Society of Japanese Oriental Medicine started to register doctors who offer kampo treatment. Registered doctors are obliged to regularly attend the meetings of the Society and to present relevant research papers. The licence has to be renewed every five years. In 1999, the Japan Society for Acupuncture and Moxibustion put into place a registration system for physicians offering these forms of treatment (WHO 2001); however, there is no information on whether registration is other than voluntary.

Non-medical complementary medicine practitioners

Any other professional practising complementary medicine is regulated under the Practitioners of Massage, Finger Pressure, Acupuncture and Moxibustion etc. Law 217 of 1947. Practitioners must pass a national examination and obtain a licence for their specific area of practice from the Ministry of Health, Labour and Welfare (WHO 2005b).

In order to sit the examination, applicants must be eligible to enter university; have studied more than three years at a school recognised by the Ministry of Education, Science and Culture or a training institution recognised by the Ministry of Health and Welfare; and have obtained the necessary knowledge for this area of practice including knowledge of anatomy, physiology, pathology and hygiene.

Judo orthopedics is regulated under the Judo Therapist Law of 1970. Practitioners must pass a national examination; obtain a licence issued by the Ministry of Health, Labour and Welfare; be eligible to enter university; and have studied judo orthopedy for at least three years (WHO 2001).

TRAINING AND EDUCATION

Medical doctors

Until recently, only a few universities included kampo medicine in their formal curriculum. In 2000, only six out of 80 medical schools in Japan had a separate department for alternative/oriental medicine and 32 medical schools offered lectures in kampo (Matsumoto and Inoue 2000). The first was established in 1993 at the Toyoma Medical and Pharmaceutical University, which is also the only one offering a four-year postgraduate Doctorate programme in kampo.

However, in 2001 kampo medicine was formally introduced into the model core curriculum for medical education, and by 2002 kampo was included in the curriculum of 89 per cent of Japan's medical schools. Similarly, kampo is now taught in 89 per cent of pharmaceutical schools and faculties (WHO 2005b).

Non-medical complementary medicine practitioners

Practitioners of acupuncture and moxibustion as well as judo orthopedics must complete a training programme of at least three years. According to WHO (2001), in 2000 22 schools and training institutions offered courses and one university offered a four-year programme in acupuncture and moxibustion. In addition, 87 schools and training institutions offered joint programmes covering several complementary therapies, seven of them five-year programmes and 22 three-year programmes. Judo therapy was taught at 25 training institutions and 91 offered programmes in Japanese traditional massage and finger pressure. Training institutions and schools must be authorised by the Ministry of Health, Labour and Welfare or the Ministry of Education, Culture, Sports, Science and Technology under the School Education Law (WHO 2005b).

Other complementary therapies such as chiropractic and osteopathy do not require registration (Suzuki 2004).

Summary

In Japan, Western medicine dominates, though a wide range of Asian and traditional medicines of other origins is available. Under Japanese legislation, complementary medicine professions are separately regulated, so that different standards apply to different forms of complementary medicine. There are no requirements for the training and qualification of medical doctors performing complementary therapies; however, there are indications that kampo is increasingly being included in the medical curriculum. Its integration into the education and practice of mainstream medicine is escalating as its effectiveness becomes more widely accepted by patients and doctors alike.

The Netherlands

Background

Until 1993, the practice of alternative medicine was prohibited in The Netherlands. The Medical Practice Act of 1865 and its amendment of 1876 officially recognised that the medical profession was the only profession allowed to practise medicine 'in its entirety'. This monopoly was primarily based on medical training at universities. In addition to physicians, dentists and midwives had the right to practise and perform certain medical procedures. Unqualified practice of 'quackery' was considered to be a danger to the public and was prosecuted by the courts (Scheepers and Hermans 1999).

Following the Second World War, complementary medicine became gradually more accepted, though it remained illegal. In the 1980s most general practitioners reportedly believed in the efficacy of some alternative therapies for certain conditions (such as acupuncture for the treatment of chronic pain, hot bath therapy, homeopathy, manual therapy and yoga) and half of them practised complementary therapies (Knipschild *et al* 1990).

Statistics

Utilisation of complementary and alternative medicine is low in the Netherlands relative to most other countries. According to the Dutch Health Interview Survey (Verweij 1996, cited in Scheepers and Hermans 1999), 6.2 per cent of the Dutch population consulted a complementary medicine practitioner in 1995; 2 per cent visited a homeopath; 0.9 per cent an acupuncturist; 0.8 per cent a naturopath; and 1.2 per cent a paranormal healer or magnetiser. In addition to complementary medicine specialists, many general practitioners offer some form of complementary therapy. Taken together, in 1995 14.6 per cent of the population visited either a complementary medicine practitioner or a general practitioner for complementary therapy. It is worth noting that paranormal healing is the second most common form of complementary medicine in the Netherlands. This form of treatment is particularly associated with religious belief, and Dutch Catholics are more likely than members of a Protestant church to visit a healer (Verheij *et al* 1999).

In 1985, approximately 4,000 complementary medicine practitioners were reported to be practising in the Netherlands: 735 naturopaths; 300 paranormal healers; 220 homeopaths; 475 anthroposophical professionals (both doctors and non-medical health personnel); 945 acupuncturists; and 1,450 manual therapists. In a 1992 survey, 40 per cent of orthodox doctors reported having provided a form of complementary therapy (mainly homeopathy) at least once (WHO 2001). However, these data may understate the present utilisation.

Reimbursement

Most private health insurance plans cover some of the more recognised complementary therapies such as acupuncture, homeopathy and manual therapies. About one-third of the Dutch population currently has substitutive private health insurance and nearly 90 per cent some form of supplementary health insurance.

Some complementary therapies, for example, homeopathy and anthroposophic medicine, are covered within the legally defined standard package or are reimbursed by sickness funds (WHO 2001).

Reimbursement usually requires that the service is provided by a medical doctor who holds a complementary medicine specialisation or by a physical therapist who is member of a professional organisation (WHO 2001). Paranormal healing is generally not reimbursed.

Overview of regulations

The Individual Health Care Profession Bill (Wet op de Beroepen in de Individuele Gezondheidszorg, BIG) was passed by the Dutch parliament in 1993 and came into force in 1998. The new Act abolished the former prohibition of complementary medicine and acknowledged the increasing public interest in alternative medicine extending patients' freedom of choice. It also sought to harmonise existing legislation, especially with regard to new specialisations of medical doctors, and to address the problem of illegal practice.

The Act regulates medical practice in two ways: first, utilisation of titles is restricted to health care professionals who are regulated by specific qualification and training requirements, namely medical doctors, pharmacists, nurses, dentists, midwives, health care psychologists, psychotherapists and physiotherapists (WHO 2001); second, certain medical procedures may be performed only by specific professions such as doctors or nurses. Unlike prior legislation, the Act does not restrict medical diagnosis. Legal sanctions are applied to those who fail to comply with the Act; however, it has been suggested that most sanctions are relatively weak (den Exter *et al* 2004).

Unlike doctors, nurses, pharmacists and psychotherapists, complementary medicine practitioners are not regulated under the new laws, nor do they need an official licence to practise. Complementary medicine practitioners are free to practise their therapies as long as they do not claim to be a doctor or other health-related professional.

This approach has been justified using the argument that the practice of complementary medicine is not ready to be recognised as a profession, and that if practitioners in the Netherlands want to achieve this status, they will have to set up their own self-regulatory organisations and define their own standards as in the case of the medical profession. Some groups of complementary medicine practitioners (for example, acupuncturists, homeopaths and manual therapists) have started to organise themselves, and are engaged in introducing standards. In 1993, the Nederlandse Vereniging van klassiek Homeopathen submitted an application to the Dutch government for homeopaths to be statutorily recognised. However, the current government does not see any convincing arguments as to why homeopathy should be regulated. Consequently, the practice of homeopathy does not require a licence at present, while the storage and prescription of homeopathic remedies remains illegal.

The Dutch Medical Acupuncture Society (Nederlandse Artsen Acupunctuur Vereniging) was established in 1973 and provides acupuncture training for doctors and dentists. This consists of 3 years of basic clinical training with a fourth year of specialisation in either traditional Chinese medicine, auricular acupuncture or electro acupuncture. The Society has developed codes of practice for these specialist practitioners, which complement those to which professionals are bound by virtue of being doctors or dentists (<http://www.acupunctuur.com/info.html>).

EDUCATION

A number of complementary medicine organisations were active in the 1990s in setting standards of training and practice as well as establishing a system of national registration

(Maddalena 1999). However, there are no compulsory educational requirements for complementary medicine professionals, whether they are doctors or non-medical practitioners.

Medical practitioners

About 60 per cent of complementary medicine practitioners have undergone medical education, mainly as doctors, physiotherapists or nurses. Several medical schools have introduced complementary medicine courses in their curricula. Doctors wishing to qualify in homeopathy, acupuncture, anthroposophical medicine or manipulative therapy can attend part-time courses, which range from one to four years.

Non-medical practitioners

Three training institutions offer full-time courses in naturopathy lasting between three and four years (Maddalena 1999, cited in WHO 2001). The requirements for homeopathic training set by the Nederlandse Vereniging van klassiek Homeopathen are in line with the European Guidelines for Homeopathic Education of the European Council for Classical Homeopathy (European Council for Classical Homeopathy 2005). The Nederlandse Vereniging van klassiek Homeopathen has been working with schools to set up an independent external Accreditation Office, with the aim that all courses meet university degree standards by 2009. In the meantime, and until accreditation and automatic registration are in place, it is considering establishing a register based on evidence provided by individual applicants.

Recent developments

Compared with other countries, the Dutch approach to complementary medicine has been considered to be 'pragmatic' (Schepers and Hermans 1999), and perhaps somewhat *laissez faire*. However, a report into the death of the Dutch comedian Sylvia Millecam, who died of breast cancer in 2001 after being treated exclusively by complementary medicine practitioners (van Dam 2004; Sheldon 2004), has prompted proposals by the Dutch Healthcare Inspectorate to strengthen regulation of complementary medicine. The Amsterdam Medical Disciplinary Tribunal struck off one doctor and suspended two others involved in the case (Sheldon 2006). The Healthcare Inspectorate has suggested the following measures be put in place in order to protect citizens against malpractice, misdiagnosis and false promise:

- registration of complementary medicine practitioners
- restrictions of diagnosis to qualified physicians
- the obligation to co-operate and to mutually exchange information between complementary medicine practitioners and doctors to achieve the 'best possible treatment' for the patient
- a compulsory protocol of the treatment agreed with the patient if the treatment does not follow the regular route.

Diagnosis has been regarded as particularly relevant as it defines the options for treatment; an incorrect diagnosis may delay or prevent necessary treatment and endanger the health of the patient. Following the Inspectorate's proposals, the Ministry of Health, Welfare and Sports considered the possibility of legislation to restrict diagnosis to qualified professionals; however, the Council for Public Health and Healthcare has advised that restricting diagnosis may have undesired consequences, such as limiting the role of pharmacists, ambulance staff and other health-related professions providing counselling and diagnosis – but it would be possible to forbid non-medical doctors questioning a

diagnosis made by a medical doctor. It is not yet clear what if any legislative action the Ministry will take, but other measures are likely to be preferred, such as improving information and stimulating public awareness (Nederlandse Vereniging van klassiek Homeopathen, personal communication).

According to the Ministry of Health, the increase in the use of complementary medicine has not led to a pressing, large-scale public health problem. However, much attention has been focused on the field since cases of preventable death following a false diagnosis by complementary medicine practitioners and foregone orthodox treatment received substantial publicity. In order to improve patients' safety, the Council for Public Health and Healthcare has recommended improvements to patient information systems, and the increasing use of existing legal instruments.

Summary

Despite the recent rise in the public acceptance and use of complementary medicine, utilisation of these therapies is relatively low in the Netherlands. Following legalisation 1998, the practice of complementary medicine has been almost entirely unregulated, with the exception that its practitioners are not allowed to use the titles of licensed health professions or to perform certain medical procedures.

There is debate in the Netherlands as to whether regulation should be introduced in order to improve patient safety. However, there is little indication that this would involve a change in legislation. Little information exists about recent developments in professionalisation and self-regulation of complementary medicine practitioners.

Norway

Statistics

Homeopathy, acupuncture and zone therapies/reflexology are the most used forms of complementary medicine in Norway (Alternative Medicine Committee 1998). In a telephone survey of 1,000 participants in 1997, 34 per cent stated that they had used complementary medicine at least once in their life (Hanssen *et al* 2005).

There is little data available about the number of practitioners, though this may change since a voluntary register has recently been introduced. According to a study commissioned by the Alternative Medicine Committee in 1997, there were 37 associations of complementary medicine practitioners. The total number of active members in the 25 associations that responded to the survey was 2,604; however, some practitioners may have held membership in several associations (Alternative Medicine Committee 1998).

Reimbursement

Under the public health insurance scheme, provision of complementary medicine is not reimbursed – with the exception of some limited coverage of chiropractic. One private insurance company offered partial reimbursement for complementary medicine (WHO 2001). In its report in 1998, the Alternative Medicine Committee decided against the introduction of public reimbursement for complementary treatment on the grounds of its low level of documented efficacy (Alternative Medicine Committee 1998).

Extent of integration with conventional medicine

As in most European countries, complementary medicine is primarily used in conjunction with conventional medicine and for specific conditions. Patients usually consult an orthodox doctor before consulting a complementary medicine practitioner, though the incidence of initial contact with a complementary therapist is increasing (Alternative Medicine Committee 1998). However, information exchange or dialogue between the two professions is almost absent (other than through patients' complaints) (Christie 1991).

Evidence on the acceptance of complementary medicine among physicians in Norway is mixed. According to Risberg (1999), 12 per cent of physicians and 32 per cent of nurses had themselves used some form of complementary medicine. However, a survey among the 1,272 members of the Norwegian Medical Association (response rate 91 per cent) showed that physicians' attitudes towards most forms of complementary medicine were fairly negative and knowledge was relatively poor. Nevertheless, this study also reports that 65 per cent of the respondents had referred patients to acupuncture (Aasland *et al* 1997). This was supported in a more recent survey among 212 general practitioners, in which 60 per cent of the respondents (response rate of 53 per cent) used acupuncture in their clinical practice (Aanjesen *et al* 2002).

Overview of regulations

Norway has the oldest regulations in Europe on the practice of medicine by non-allopathic physicians, dating back to 1619. Until recently, complementary medicine was tightly restricted under the Medical Quackery Act, which came into force in 1936.

In 2003, the Norwegian government introduced new legislation on the regulation of complementary medicine practitioners. The Act No 64 of 27 June 2003, relating to the

‘alternative treatment of disease, illness etc.’ and Regulations, specifying its implications (such as Regulation No 1500 of 11 December 2003 regarding a ‘voluntary registration scheme for practitioners of alternative treatment’) came into force in 2004.

The Act No 64 responds to the increasing consumer demand for complementary medicine and aims to safeguard patient safety and ‘business-like orderliness’ among complementary medicine practitioners. The regulation of practitioners is primarily based on the mechanisms of professional self-regulation and voluntary membership.

The new Act is embedded in existing health-related legislation, such as the Health Personnel Act, which covers practitioners of conventional medicine; the Patient’s Rights Act; the Communicable Diseases Act; and the Act relating to procedure in cases concerning public administration (1967).

LICENSING

Act no 64 does not specifically state that complementary medicine practitioners need a licence to practise. Practitioners are encouraged to become registered on a voluntary basis at the newly established Brønnøysund Register Center. It also does not define requirements for practice for medical doctors or nurses to practise complementary medicine, though these practitioners may choose to register if they wish to claim to be a ‘registered’ complementary medicine practitioner.

To qualify for registration, a practitioner must be a member of an approved professional organisation. (Act No 64, 2003). Associations have to be approved by the Norwegian Directorate for Health and Social Affairs. In order to receive approval, associations must have statutes setting professional qualifications for members, ethical rules and professional responsibilities. Self-regulatory mechanisms must also be in place relating to the duty to provide information to patients, protection of data, safeguarding the rights of the patient to complain and sanctions against members. Associations are required to have at least 30 members and must be registered in the Central Coordinating Register for Legal Entities (Regulation No 1500).

Complementary medicine practitioners applying for registration also need to be either self-employed, employed by a registered employer or a partner in a registered general partnership (registration refers to the status as a legal entity). They must also be insured for any financial liability to patients (Regulation No 1500). The registration fee was NOK500 and the annual retention fee NOK300 in 2007 (www.brreg.no/english/fees_reg/index.html).

In order to maintain registration, members must pay an annual fee determined by the Ministry of Health and submit documentation of the above-mentioned requirements. Unless complementary medicine practitioners are registered under Act No 64, they may not use the title ‘registered’ for their practice of complementary medicine (this applies both to both doctors who practise complementary medicine and to other complementary medicine practitioners). Such titles as ‘physician’ and ‘nurse’ are restricted under the Health Personnel Act.

There is little information about which complementary medicine specialisations are eligible for registration or have received professional status. Chiropractic has been recognised as a profession since 1990 and only licensed chiropractors (that is, members of

the Association) are permitted to use the title ‘chiropractor’ (WHO 2001). Also, before Act No 64, chiropractors were required to have completed a training programme and passed an examination at an approved institution (WHO 2001).

The Norwegian Homeopathic Association has applied to the Norwegian Ministry of Health for statutory recognition as a profession. According to the European Council for Classical Homeopathy, the application is currently being considered by the Directorate of Social Affairs and Health (European Council for Classical Homeopathy 2005).

EDUCATION AND TRAINING

There is no reference in Act No 64 to the education of complementary medicine by medical doctors or other registered health personnel. With regard to the new Regulation, it has been noted that medical doctors may have an increased role as gatekeepers to complementary therapies. However, it has also been a criticism that the government has not provided training courses for physicians to fulfil this role responsibly (Longtin 2004).

Act No 64 does not specify any training standards for complementary medicine practitioners. However, it states that practitioners who wish to become officially registered have to be members of an approved professional organisation having statutes relating to professional qualification for its members. The contents and level of qualifications are not defined by Act.

However, the Directorate of Social Affairs and Health Working Committee has recommended four years of full-time education for the training of acupuncturists and homeopaths, in order to allow for sufficient supervised practice during training and to ensure their ability to practise independently afterwards.

PRACTICE

The scope of practice for complementary medicine practitioners is specified in the Act by exclusion. Serious health hazards and diseases defined in the Communicable Disease Act are to be treated only by specific health personnel such as doctors and nurses.

However, the Act also defines broad exemptions to the rule. Complementary medicine may be practised if the purpose of the treatment is to alleviate or moderate symptoms, the patient is old enough to consent to alternative treatment under the Patients’ Right Act, the treatment is authorised by a medical doctor, or if no other treatment is available (Act No 64, Sections 5–7). In addition, it allows the administration of treatment for the consequences or side effects of given (conventional) treatment, or where the purpose of treatment is to strengthen the body’s immune system or ability to heal itself.

Complementary medicine practitioners are not allowed to use controlled medications in treatment, surgery, injections, anesthesia and other methods of diagnosis and treatment restricted to physicians by prior legislation that is not affected by the new Act (such as the Health Personnel Act).

PATIENT INFORMATION AND MARKETING

Associations approved under Act No 64 must have statutes that members must undertake to give the necessary information to the patient and must handle health and personal data in a professionally responsible manner (Regulation No 1500).

Marketing of complementary medicine has to be carried out in an objective and factual way and in a manner that helps to safeguard the patient's safety. The therapist's name, address, telephone number and other necessary contact information must be clear from the marketing of the activity (Regulation No 1501).

An information clearing house of non-traditional treatments and guidelines that propose honest and factual marketing of alternative therapies has been established (Longtin 2004; Alternative Medicines Committee 1998).

Summary

In 2003, Norway abolished the prohibition of what had been termed 'quackery' and introduced new legislation with regard to complementary medicine. This Act responds to the increasing interest of consumers in complementary medicine. Taking all complementary therapies under one umbrella, the Act outlines registration of practitioners on a voluntary basis and self-regulation by professional associations. As regulation has only recently been put into force, there are many open questions. It has been argued that case law will have to clarify the implementation of the Act, which is not yet legally defined (Longtin 2004).

Republic of Korea

Background

The role of traditional Korean medicine practitioners in the provision of health care in South Korea today has to be understood in the context of a twentieth-century struggle for official recognition. Ever since the 1900 Decree of Doctor and 1913 Decree of Medical Person, traditional practitioners in South Korea have experienced an alternating series of exclusions and recognitions in medical legislation (see Table 2 below). The first half of the century (especially during Japanese colonial rule from 1910 to 1945) was characterised by an active curtailment of the practice of traditional Korean medicine, which was then followed by a post-independence period of ‘reluctant recognition’, and finally a decade of dispute known as the 1990s ‘Hanyak Punjaeng’ (oriental medicine vs pharmacy dispute).

Notwithstanding this rocky path to recognition, Korea is one of three countries (together with China and the Socialist Republic of Viet Nam) highlighted for having a substantially ‘integrative approach’, with traditional medicine playing an important role in medical education, research and practice today (World Health Organisation 2002, p 9). It may be more accurate to speak of the *parallel* development of two separate forms of medical practice – biomedicine and oriental medicine – with their respective forms of educational requirements, representative associations, disciplinary procedures and codes of conduct. Although modern medicine plays a central role in the education of oriental medicine practitioners, the opposite is not necessarily true.

Statistics

The vast majority of traditional practitioners in Korea specialise in herbal medicines and are recognised by the title ‘oriental medicine doctor’ (or ‘herb doctor’). Further to this predominant group of practitioners, there is also a range of ‘quasi-medical’ practitioners who specialise in acupuncture, moxibustion, bone setting and/or massage. There is also a significant number of traditional shamans and healers operating in especially more rural areas, but they are by law excluded from the provision of ‘medical treatment’. Finally, there is a very small number of practitioners in Western complementary therapies such as homeopathy and chiropractic.

TABLE 2: WESTERN AND ORIENTAL MEDICAL DOCTORS (1914–2000)

	Western doctors	Oriental doctors
1914	732	5,827
1920	1,111	5,376
1930	1,972	4,594
1940	3,660	3,604
1950	4,577	1,651
1960	7,765	2,922
1970	14,932	3,252
1980	22,564	3,015
1990	42,554	5,792
2000	72,503	12,108

(Sources: Cho 1999, pp 153, 262; Korea. Ministry of Health and Welfare 2003)

According to Cho (2000), while generally speaking oriental medical doctors provide health care services in much the same way as medical doctors and are recognised on an equal basis in legislation, there are some crucial differences. First, there are only some 12,000 qualified oriental medical doctors compared to Korea's 70,000 medical doctors. Second, the vast majority of the former work in urban, self-employed, privately run primary care settings. For example, in 1995 95.1 per cent of oriental medicine clinics and hospitals were located in urban areas compared to 90.6 per cent of medical clinics and 86.4 per cent of medical hospitals (Cho 2000, p 124). The vast majority of herb doctors work in privately run hospitals, clinics and sanatoriums. This is largely because general hospitals are legally designated as domains in which doctors and dentists practice but not herb doctors (see *also* Cho 1999). Finally, oriental medicine accounted for only approximately 3 per cent of national health insurance spending in 1996 (Cho 1999).

Educational requirements for oriental medical doctors

The amended Medical Act of March 1962 stipulated that all oriental medical doctors should be educated in the medical faculty of the National University before taking the qualifying examination. This stipulation proved to be short lived as it met considerable resistance from traditional practitioners, who took it to be a subordination of oriental medical doctors to sub-specialists of modern medicine – which, indeed, was the declared ambition of the Korea Medical Association at the time. A few months later, in December 1963, this stipulation was amended to require that oriental medical doctors should be educated in the medical faculty of any recognised university before taking the qualifying examination. This legislation has resulted today in the existence of a total of 11 oriental medical colleges, each of which is, again, privately run.

Today, becoming an oriental medical doctor requires six years of study (as does becoming a medical doctor), which is divided into two years of pre-medical courses and four years of medical courses including one year of bedside teaching (Kim and Lim 2004, p 1999). 'Western' anatomy, physiology, pathology, microbiology and diagnostics are central components of the training of oriental medical doctors, accounting for up to 50 per cent of course content, with the remaining content focused on the philosophy, theory and diagnostics of traditional Korean medicine, which is closely related to traditional Chinese medicine ('yin yang' and 'five elements' theories being the most important). Herbal medicine and acupuncture are the main therapies of the oriental medical practitioner and are by law exclusive to him or her. During their training, oriental medical doctors can (as can medical doctors) specialise in internal medicine, gynecology, pediatrics, ear-nose-throat or neurology-psychology. They can also choose to specialise in acupuncture and moxibustion.

Part of the consolidation of oriental medicine as an independent and parallel profession to modern medicine has been the creation of a network of research institutes dedicated to the modernisation of oriental medicine. For example, the 1994 Korea Institute of Oriental Medicine Act stipulated its establishment for the 'enhancement of public health through systematic and specialised research into Oriental Medicine'. It consists of a number of research teams covering: oriental medicine; pharmacy; genetic engineering; health sciences; biology; and agriculture. A Policy Division on Oriental Medicine under the Ministry of Health and Welfare was also established in 1996 to oversee and ensure the development of oriental medicine.

Overview of regulations

The bulk of regulations are aimed at oriental medicine practitioners, though ‘quasi-medical’ practitioners have been under the remit of national Medical Acts since the 1960s.

The most important Acts pertaining to the regulation of traditional medicine practice in Korea are the 1951 Medical Act (with subsequent amendments), 1973 Medical Service Act (with subsequent amendments), the Korean Institute of Oriental Medicine Act and the Pharmaceutical Act. It is these Acts that have provided the basis for the development of parallel systems of health care.

LICENSED MEDICAL PERSONNEL

According to Article 25 of the Medical Service Act, ‘no person other than a medical person shall conduct medical treatment, and no medical person shall perform medical treatments other than those licensed’. For this reason, it is important to understand what is meant by the legally ‘licensed medical person’ in Korea.

Since 1951, there have been five legally recognised classes of ‘medical persons’ – doctors, dentists, herb doctors (oriental medical doctors), midwives and nurses – who must be licensed by the Ministry of Health and Welfare in order to practise. Each of these groups of practitioners is bound by law to form central associations responsible for maintaining registers of licensed practitioners, and each has a specified national level of qualification as well as a circumscribed set of duties (see Table 3 below).

Articles 8 and 53 of the Medical Service Act outline grounds for disqualification and/or suspension of qualification that apply to each of the recognised classes of ‘medical persons’. These include when a medical person: has committed an act gravely impairing the dignity of a medical person; has prepared and issued a false diagnosis, written result of autopsy or other certificate; suffers from any mental disease; is an addict of narcotics; or has violated the Act or an order issued under this Act. A Central Medical Examination Council is responsible for arbitrating ‘disputes on medical treatment’ and it is this Council that deliberates over questions relating to the extent of medical treatment acts and the limit of services pursuant to the classification of medical persons.

The legal framework for medical practitioners has resulted in the current situation of the two independent and parallel professions of medical doctor and herb doctor (oriental medical doctor), with respective specified duties, qualification requirements and representative associations.

The Association of Korean Oriental Medicine is responsible for maintaining a register of practitioners, which is currently at around 12,000. Since 1983, each practitioner has had to adhere to a Code of Ethics, which works more as a mission statement than a legally binding document. It obliges oriental medical doctors to respect the integrity of patients, refrain from ‘unethical acts’ and degrading self-promotion and advertisement, and to devote themselves to the duty of health care and the development of the community. Disciplinary and penal matters remain under the domain of the Central Medical Examination Council, which consists of Ministry of Health and Welfare appointed representatives.

QUASI-MEDICAL PERSONNEL

Further to these five legally licensed groups of practitioners, Korean law also recognises four groups of ‘quasi-medical persons’ (acupuncturists, moxibustionists, bone setters and massage therapists), who are subject to limitations of their business and criteria for the place of practising treatment as determined by separate Ordinances of the Ministry of Health and Welfare. While they are not subject to licensing requirements, they must possess a ‘certificate of qualification’ in order to practise these forms of therapy. Practitioners of ‘Western’ complementary therapies such as homeopathy and chiropractic are not legally recognised at this stage and can therefore practise only illegally.

The status of ‘quasi-medical persons’ as practitioners of independent professions is less clearly defined when it comes to specified duties, qualification requirements and representative associations. ‘Quasi-medical persons’ must obtain a ‘certificate of qualification’ and they are subject to Ordinance-defined limitations to their practice.

TABLE 3: LEGAL DEFINITIONS AND JURISDICTIONS OF RECOGNISED ‘MEDICAL PERSONS’

Medical person	Medical institution	Duties	License requirement	Association
Doctor	General hospital Hospital Sanatorium Medical clinic	To engage in medical treatment and health guidance	Graduate from a university specialising in medical science with a Bachelor's degree in medical science	Korea Medical Association
Dentist	General hospital Dental hospital Dental clinic	To engage in dental treatment and guidance of oral health	Graduate from a university specialising in dentistry with a Bachelor's degree in dentistry	Korean Dental Association
Herb doctor (oriental medical doctor)	Herb hospital Sanatorium Herb clinic	To engage in herbal medical treatment and herbal guidance	Graduate from a university specialising in herb medical science with a Bachelor's degree in herb medical science	Association of Korean Oriental Medicine
Midwife	Midwifery clinic	To engage in assistance in child delivery and in guidance of health and nursing of pregnant women, women in childbirth, lying-in women and newborn babies	Pass national examination for midwife	Korean Midwives' Association
Nurse		To engage in the recuperative nursing of, or in the assistance of medical examination and treatment to, injured and sick persons or women in childbirth, and in public health activity prescribed by the Presidential Decree	Pass national examination for nurse	Korean Nurses' Association

(Source: Korea. Ministry of Health and Welfare 2004)

Summary

While Korea has unquestionably integrated oriental medicine into its national health delivery system, this has happened via a route of consolidating an independent and parallel profession of 'oriental medicine' with its own exclusive domain, duties, educational requirements and representative association (though disciplinary powers remain centralised). At the same time, 'Western' theories and diagnostic techniques have been integrated into the training curriculum of oriental medical doctors. This has raised the debate as to what extent the current independence of traditional medicine in Korea has come at the cost of being 'co-opted' through a Westernised process of modernisation. Finally, while 'quasi-medical persons' continue to play a role in the provision of health care in Korea today (especially non-oriental medical doctor acupuncturists/moxibustionists, of which there are an estimated 4,500), it seems likely that acupuncture and moxibustion will be fully integrated into the domain of the oriental medical doctor in the coming years.

Singapore

Background

Complementary medicine has a long tradition in Singapore, officially dating back to the foundation of the Colony of Singapore under the British. Traditional Chinese medicine, in particular, has always been considered to be part of the cultural heritage and tradition, though until recently its practice was not regulated. However, the increasing interest in traditional medicine worldwide as well as in Singapore motivated the government to review the standards of training and practice for traditional Chinese medicine practitioners.

Statistics

In a recent survey, 76 per cent of the population stated that they had used one form of traditional medicine within the last 12 months (Lim *et al* 2005). The Ministry of Health estimates that about 12 per cent of outpatient treatment per day involves traditional Chinese medicine.

Traditional Chinese medicine is the most common form of complementary therapy in Singapore, used by 88 per cent of complementary medicine users. However, due to the multi-ethnic composition of the population, other forms of Asian traditional medicine are practised as well, such as traditional Malay medicine (jamu – 8 per cent) and traditional Indian medicine (Ayurveda – 3 per cent) (Lim *et al* 2005). Of traditional Chinese medicine, acupuncture and herbal medicine are the most frequently used forms, followed by moxibustion, acupressure, qigong, massage and diet (Ho 2001).

The Ministry of Health acknowledges the importance of traditional Chinese medicine and its roots. However, the Ministry has primarily committed itself to modern (Western) medicine and stresses the co-existence rather than the integration of these two kinds of medicine. Traditional Chinese medicine is mostly used for the maintenance of health rather than for the treatment of illness and is restricted to outpatient care (Lim *et al* 2005).

Overview of regulations

TRADITIONAL CHINESE MEDICINE

Since 1994, the government has shown a more active interest in patients' safety and has tried to enhance the standards of training in and practice of traditional medicine. It has been suggested that the importance of regulating the practice of traditional Chinese medicine therapies and medication has increased during the 1990s because of the growing traditional Chinese medicine market, with which Singapore maintains close links (Quah 2003).

In order to define standards and to supervise regulation, in July 1994 a committee was appointed by the Minister for Health to review the practice of traditional Chinese medicine in Singapore and recommend measures to safeguard patient interest and safety, and to enhance the standard of training of traditional Chinese medicine practitioners. A Traditional and Complementary Department was set up in the Ministry of Health in November 1995 to oversee and co-ordinate the implementation of its recommendations. Meanwhile, the government also encouraged the self-regulation of practitioners to represent the traditional Chinese medicine community and to upgrade standards, which resulted in the

foundation of the Singapore Traditional Chinese Medicine Organisations Coordinating Committee (Quah 2003). In 1997, the self-regulatory committee set up a Code of Practice.

Since 2000, parliament has passed six pieces of legislation to regulate traditional Chinese medicine:

- Traditional Chinese Medicine Practitioners Act 2000 (No 34 of 2000)
- Traditional Chinese Medicine Practitioners (Registration of Acupuncturists) Regulations 2001 (S 95/2001)
- Traditional Chinese Medicine Practitioners (Register and Practicing Certificates) Regulations 2001 (S 221/2001)
- Traditional Chinese Medicine Practitioners (Practice, Conduct and Ethics) Regulations 2001 (S 473/2001)
- Traditional Chinese Medicine Practitioners (Investigation of Complaints) Regulations 2001 (S 474/2001)
- Traditional Chinese Medicine Practitioners (Registration of Traditional Chinese Medicine Physicians) Regulations 2002 (S 40/2002).

ACUPUNCTURE AND TRADITIONAL CHINESE MEDICINE

Under the Traditional Chinese Medicine Practitioners Act, the Traditional Chinese Medicine Practitioners Board was established on 7 February 2001. The functions of the Board include:

- to approve or reject applications for registration
- to accredit courses in the practice of traditional Chinese medicine in Singapore for the purposes of registration and the institutions of higher learning in Singapore offering any of these courses
- to make recommendations to the appropriate authorities for the continuing training and education of registered persons
- to determine and regulate the conduct and ethics of registered persons.

Under the Traditional Chinese Medicine Practitioners Act 2000, traditional Chinese medicine physicians and acupuncturists are required to register with the Traditional Chinese Medicine Practitioners Board.

The registration of traditional Chinese medicine practitioners was carried out in phases, starting with acupuncturists in 2001 and followed by traditional Chinese medicine physicians in 2002.

Under the Traditional Chinese Medicine Practitioners Act, passing a common qualifying examination is a mandatory requirement for the registration of traditional Chinese medicine practitioners. However, as this was the first time such practitioners had been registered, a special transitional arrangement was made for those already practising traditional Chinese medicine in Singapore before implementation of the legislation.

The transitional arrangement for the registration of acupuncturists and traditional Chinese medicine physicians was completed in 2003. As of 1 January 2004, all who wish to practise traditional Chinese medicine in Singapore must possess qualifications approved by the Traditional Chinese Medicine Practitioners Board and pass the Singapore Traditional Chinese Medicine Physicians Registration Examination before they are eligible for registration. As of 31 December 2005, 1,984 traditional Chinese medicine practitioners were registered with the Board.

VOLUNTARY LISTING OF CHINESE MEDICINE MATERIAL DISPENSERS

With the successful registration of acupuncturists and traditional Chinese medicine physicians, there is a plan to consider the registration of Chinese medicine material dispensers. With the assistance of the Ministry of Health, the Chinese Medicine Material Dispensers Training Course was started by the private sector in July 2002. This is a four-and-a-half-year part-time modular course comprising basic, intermediate and advanced modules, and is conducted jointly with the Beijing University of Chinese Medicine. It is accredited by the Board such that graduates of the intermediate module will be eligible for registration as dispensers in the future. As a first step towards future registration, 173 trainees who graduated from the intermediate module in December 2005 were voluntarily listed with the Board in June 2006.

Summary

The Singapore government is taking an incremental approach to the implementation of new traditional Chinese medicine legislation. Since 2000, legislation has been passed to regulate the training, licensing and a code of practice for traditional Chinese medicine practitioners. Other forms of complementary and alternative medicine are not regulated at present. The goal of regulation has been to improve standards and to enhance safety for patients.

Socialist Republic of Viet Nam

Background

As has been the case in many countries throughout the world, the Socialist Republic of Viet Nam has experienced a significant ‘revival’ in the practice and use of traditional medicine. It is often traced back to late President Ho Chi Minh’s 1955 appeal ‘to study means of uniting the effects of oriental remedies with those of Europe’. Traditional medicine in the Socialist Republic of Viet Nam comprises of two components: a plant remedy-based form of medicine referred to as *thuoc nam* (southern medicine) and a Sino-Vietnamese theory and system of healing referred to as *thuoc bắc* (northern medicine), which includes herbal medicine, acupuncture, massage and exercise techniques (see also Hoàng *et al* 1999).

Statistics

Research institutions and departments have proliferated to the extent that by now there are around forty national or provincial traditional medicine hospitals, more than 50 Departments of Traditional Medicine in various provincial hospitals, and all seven of the Socialist Republic of Viet Nam’s medical colleges have a Department of Traditional Medicine.

Traditional medicine practitioners can be classed into three different groups: first, a ‘dying breed’ of elder practitioners who have been trained in classical traditional medical techniques with a classical theoretical and philosophical base; second, those who have received training at the traditional medicine faculties of medical colleges or secondary schools of traditional medicine; and third, ‘herb doctors’, who have received no formal training but have acquired knowledge and experience through apprenticeships (Bùi 1999). Nguyen (2003) points out that there are also up to 10,000 traditional ‘healers’ in the Socialist Republic of Viet Nam, who can be divided into fortune tellers (*thay boi*), bonzes or Buddhist priests (*thay phap*) and ‘witchdoctors’ (*thay phu tuy*), but tellingly these kinds of practitioners are invariably excluded from national programmes to promote Vietnamese traditional medicine (see Table 4).

TABLE 4: MEDICAL PRACTITIONERS IN THE SOCIALIST REPUBLIC OF VIET NAM

	Number
Population	80 million
Medical doctors	43,362
(of which traditional medicine specialists)	(7,800)
Herb doctors	40–50,000
Traditional healers	10,000

(Sources: World Bank 1993; Huu and Borton 2003; Nguyen 2003; Viet Nam Economy 2003)

Extent of integration with conventional medicine

Ho Chi Minh’s 1955 call marked the beginnings of a more or less consistent strategy to integrate traditional medicine into the health delivery system that the French colonialists had put into place. Since that time, scientists, government officials and practitioners have

engaged in a number of concrete measures to integrate what is known as Vietnamese traditional medicine into national health delivery systems. At the core of this strategy has been a network of institutions with the mandate to modernise, standardise and repopularise Vietnamese traditional medicine.

The first of these was the National Institute of Traditional Medicine, which was opened under the Ministry of Health in 1957 to preserve the legacy of traditional medicine by collecting knowledge about it as well as to promote scientific research into its methods and remedies.

A few years later, in 1961, the Institute of Materia Medica was opened with a mandate to ‘modernise... various types of traditional medical formulations (Institute of Materia Medica, Viet Nam 2004). And, in the same year, a Department of Traditional Medicine was opened in the previously French-run Hanoi Medical College to signal ‘cooperation between the Traditional Medicine and modern medicine systems in the fields of disease prevention, production of treatment medicine, staff training and scientific research’ (Nguyen 1998).

There are 40 or so specialised national and provincial hospitals of traditional medicine. In addition, the Ministry of Health stipulated by decree in 1976 that each district hospital was to have a department or section specialising in traditional medicine, which are often staffed by ‘assistant doctors’, though some medical doctors who have specialised in traditional medicine also work at this level. Finally, it is also government policy that each commune clinic strives to have at least one staff worker specialised in traditional medicine, responsible also for keeping a garden of medicinal herbs (Hoàng 2004). Herb doctors continue to play an important role in the delivery of health care, especially in rural areas of the country, and will often work in co-operation with commune clinics and district hospitals.

Education of traditional medicine specialists and ‘assistant doctors’

One of the main ways in which the practice of traditional herbal medicine is regulated in the Socialist Republic of Viet Nam is through mandatory medical training standards.

Both modern and traditional medicine are compulsory components of medical education and practice. Students attending one of the Socialist Republic of Viet Nam’s seven medical colleges are required to follow 16 compulsory courses in traditional medicine (covering classical theory, diagnostics, medical botany and acupuncture) in the first 4 years of their degree. Those wishing to do so can then choose to specialise in traditional medicine (primarily herbal medicine or acupuncture) in their final two years (*see also* World Bank 1993, p 30).

Outside of the Socialist Republic of Viet Nam’s medical colleges, the Tue Tinh secondary colleges of traditional medicine (the first of which was established in Hanoi in 1971) offer three-year ‘assistant doctor’ diplomas, which likewise cover both modern and traditional medicine as well as providing further education and ‘refresher courses’ for practising medical doctors (World Bank 1993, p 31). Traditional medicine graduates from both the medical colleges and the secondary colleges are destined for work in the extensive network of health services found at national, provincial, district and commune levels in the Socialist Republic of Viet Nam.

Regulation of ‘herb doctors’

The second route to regulating the practice of traditional medicine has been through the organisation of apprentice-trained (rather than college-educated) herb doctors into national associations, as well as the development of a licensing system for these practitioners.

The first National Association of Traditional Practitioners was formed in 1957 by an active group of herbalists who were incensed by colonial attitudes to their trade. This Association was to play an important role in the national objective to collect and preserve knowledge about the practices and remedies of Vietnamese traditional medicine. The Association has expanded into a network of associations at the provincial and district levels, with membership estimates ranging from 20,000 to 34,000, which in turn is estimated to represent some 50–60 per cent of all traditional medicine practitioners in the Socialist Republic of Viet Nam (see also World Bank 1993; Huu and Borton 2003).

‘Herb doctors’ constitute a separate category of traditional practitioner, subject to different practice requirements. With the passing of the Socialist Republic of Viet Nam’s fourth constitution in 1992, according to which it became ‘strictly forbidden for private organisations and individuals to dispense medical treatment, or to produce and trade in medicaments illegally, thereby damaging the people’s health’ (Article 39), the qualifications of privately practising traditional practitioners have come under increasing scrutiny. The constitution has since been followed up by national regulations to govern the private practice of traditional medicine, requiring herb doctors to register their practices with provincial health authorities and to apply for a practising license that will be awarded only after an evaluation by health authorities, often in co-operation with provincial or district associations of traditional medicine practitioners. These regulations include the Ministry of Health’s Ordinance on the Practice of Private Medicine and Pharmacy from 13 October 1993 and, more specifically, Circular No13/1999/TT-BYT ‘guiding the implementation of the ordinance on the practice of private medicine and pharmacy, regarding the traditional medicine and pharmacy’ from 6 July 1999. As noted in a report for the World Bank, ‘a strong thrust of [this] legislation is to ensure that practitioners are properly qualified’ (World Bank 1993, p 41). This process is for the most part still in its infancy since by 2003 the Ministry of Health had licensed ‘only’ 3,715 private practices of traditional medicine (Huu and Borton 2003, p 89), which is in sharp contrast to the estimated 20,000 members of the National Association of Traditional Practitioners.

There is no doubt that apprentice-trained herb doctors are seen as important partners in the provision of primary health care, especially in rural areas, but at the same time a number of public health concerns about their abilities have been raised. For example, the World Health Organisation in the Socialist Republic of Viet Nam lists as key obstacles that: their explanations can appear ‘mysterious’; some practitioners are not sufficiently qualified, while others overstate their abilities; their lack of knowledge of modern medicine can be harmful to patients; and they tend to keep their ‘know-how’ secret (World Health Organisation 2004a). In light of concerns of this kind, Bui has argued that, ‘if traditional practitioners are to play an effective role in health care, it is necessary to advance their professional skills’ (Bui 1999).

Although, as already mentioned, this is a process that has only just begun, proposals and initiatives for addressing these concerns are plentiful, including a recent crack-down on traditional medicine establishments by the Ministry of Health (Vietnam News Agency

2004) and a World Bank consultant's suggestion that 'concerns about qualifications could be offset by increasing on-job training for private practitioners' (World Bank 1993, p 42), as well as the WHO's call for 'a distance learning programme... in response to the urgent need to upgrade the skills and knowledge of Traditional Medicine doctors working at provincial and district levels' (World Health Organisation 1997, p 4). The various Traditional Medicine Associations and Secondary Schools of Traditional Medicine have also responded to these concerns by providing training courses and refresher courses for members, for example in the basics of anatomy and physiology (Bùi 1999; Huu and Borton 2003, p 61).

Summary

The government revived interest in and knowledge of traditional Vietnamese medicine throughout the second half of the twentieth century. Medical doctors are able to specialise in either Western medicine or traditional Vietnamese medicine and practice is fully integrated throughout the state health care system, with access assured even in rural areas. Recent efforts have been made to regulate the practice of 'herb doctors' trained by apprenticeship. However, the implementation and enforcement of registration is proceeding slowly.

South Africa

Background

In South Africa, traditional medicine is deeply interwoven into the fabric of cultural and spiritual life. Before colonisation by the Dutch in the seventeenth century, traditional healers were the only practitioners providing medical care.

There are three main types of traditional healers in South Africa:

- Traditional doctors or inyanga – herbalists who offer treatment using curative herbs and medicines of animal origin. About 90 per cent of the inyanga are male.
- Diviners, called isangomas (Zulu), dingakas (Sotho) or amgqiras (Xhosa) – who usually operate within a religious supernatural context and act as mediums with the ancestral spirits. Only those ‘called’ by the ancestors can become a diviner. About 90 per cent are female.
- Faith healers, called umprofethi or umthandazi – who integrate traditional practice into Christian rituals. Faith healers usually belong to one of the independent African churches and heal by prayer, by using holy water or ash, or by touching the patient.

In addition, traditional birth attendants also offer medical services. These are usually elderly women, who enjoy the respect of their community for their skills. If a complication occurs, the traditional birth attendant will seek advice from an inyanga. The prerequisite for becoming a traditional birth attendant is having given birth to at least two children. Finally, there are traditional surgeons who perform circumcision as part of an African cultural initiation ceremony (Freeman and Motsei 1992; Kale 1995)

Statistics

It has been estimated that about 200,000 traditional healers practise in South Africa, compared with 25,000 doctors of modern medicine. Traditional healing is particularly widespread among the black population, with about 80 per cent using the services of traditional healers, especially in rural areas (Kale 1995; Sidley 2004).

The traditional medicine industry is worth up to ZAR2.3 million (about US\$343,000) per year (Clarke 1998).

Reimbursement

Traditional healers practise privately and are not usually integrated into the official public health care system. The head of the Traditional Healers’ Organisation has suggested that traditional medicine cannot be integrated into the conventional medical system but should instead co-exist in parallel with it (Hess 1998).

The majority of people pay out of pocket for health services, including the services of traditional healers. Fees vary widely and can be quite considerable. Payment is not exclusively monetary; for example, a healer may accept a cow after curing a patient (Kale 1995). Traditional birth attendants are not usually paid for their services but do accept gifts.

The Medical Schemes Act allows for health services rendered by a registered health practitioner to be reimbursed. Since the new Traditional Health Practitioners Act 2004 came into force on 13 January 2006, traditional healers have been able to apply for

registration and to claim fees from the medical aid schemes of their patients. It is not clear how many have done so to date.

Organisations of traditional healers

During the Apartheid regime, healers who were not registered with the South Africa Medical and Dental Council were prohibited from practising any form of procedure pertaining to medical professions (based on the Health Act of 1974). However, although such practice was officially illegal, there were a number of organisations that claimed to represent the interests of traditional healers. These included the Association of Traditional Healers of Southern Africa, the Southern African Traditional Healers Council, the Congress of Traditional Doctors of South Africa, the Africa Dingaka Association and the Africa Skilled Herbalist Association (Freeman and Motsei 1992).

Overview of regulations

In September 2003, the South African parliament passed a new law to regulate traditional healers. The Traditional Health Practitioners Act 2004 seeks to establish a Traditional Health Practitioners Council. The objects of the Council are to:

- promote public health awareness
- ensure the quality of health services within the traditional health practice
- protect and serve the interests of members of the public who use or are affected by the services of traditional health practitioners
- promote and maintain the appropriate ethical and professional standards required from traditional health practitioners
- promote and develop interest in traditional health practice by encouraging research, education and training
- promote contact between the various fields of training within traditional health practice in the Republic and to set standards for such training
- compile and maintain a professional code of conduct for traditional health practice
- ensure that traditional health practice complies with universally accepted health care norms and values (Government Gazette 2005).

The Act requires that every traditional health practitioner, including traditional birth attendants, herbalists, diviners and traditional surgeons, is officially registered (Department of Health, communication; Sidley 2004). However, it is the responsibility of the Council to decide whether regulation should be extended to spiritual healers as well.

The Traditional Health Practitioner Act 2004 has not yet been fully implemented nor has the Council been set up; according to the legal unit of the Department of Health, processes are in place for its establishment. All other regulations regarding the education, registration and practice of traditional medicine practitioners are planned to be drafted after the Council has been established (Department of Health, communication).

The Act requires that all registered traditional health practitioners inform the patient or client in advance of the fee to be charged for the service. It is illegal for any non-registered traditional health practitioner to undertake physical examinations, diagnose, advise, treat or prescribe traditional medicines or substances for gain or to hold themselves out as a traditional health practitioner. The rules governing the limits to scope of practice, standards of education and training, fees payable and so on may be changed by the Minister of Health after consultation with the Council. The Council itself only has powers to change rules governing its business and administration procedures.

EDUCATION

Most diviners and traditional healers have traditionally been taught by apprenticeship. The duration of training may have lasted from a few weeks to up to 10 years, depending on the ability of the apprentice. Training of traditional birth attendants usually took up to 20 years. Traditional healers frequently had to serve an apprenticeship of between one and five years before being accepted within their community and among other traditional healers. Healers could register with the Traditional Healers Organisation, which issued certificates to members (Hess 1998).

Under the new Act, minimum educational qualifications will be set by the Minister of Health, on the recommendation of the Council, which must be obtained by registrants by successful completion of examinations at an accredited institution or other examining authority (Government Gazette 2005).

As yet, new regulations for training and formal education have not been introduced in any area of traditional medicine. It is planned that practitioners will have to be trained at an institution accredited by the education authority. The duration of and standards for training have yet to be defined (Department of Health, communication).

Summary

Traditional healing is widespread in South Africa. The government passed the Tradition Health Practitioner Act in 2004, which requires all traditional health practitioners to register with a newly established Council. As the new legislation is implemented, it will put in place standards of education, training and practice. However, many of the rules and standards are not yet in place. It is unclear what impact this will have on the integration of traditional medicine practitioners into the public health system, recognition of their diagnosis and certification of the sick and on practitioner reimbursement.

United Kingdom

Background

In Britain, traditions of herbal medicinal use were recorded in published herbal pharmacopoeias dating back to the sixteenth and seventeenth centuries. Homeopathy became popular during the nineteenth century and was taught at medical schools. Interest in traditional Chinese medicine and acupuncture also dates back to the early nineteenth century but these therapies have become more commonly practiced only recently. Chiropractic and osteopathy were introduced from the United States of America in the early 1900s. Other traditional medical systems such as tibb, kampo, Ayurvedic, Maharishi Ayurvedic and unani as well as traditional African medicine are also found, though these tend not to be widespread outside immigrant communities. The House of Lords Select Committee on Science and Technology identified 29 different therapies in its report into Complementary and Alternative Medicine (though this was not exhaustive) (House of Lords Select Committee on Science and Technology 2000).

Statistics

According to population surveys, the most commonly used therapies and products are acupuncture, aromatherapy, chiropractic, herbalism, homeopathy and osteopathy (Goldbeck-Wood 1996; Thomas *et al* 2001). The most recent population-wide survey, conducted in 2001, estimated that 10 per cent of the population had received complementary or alternative therapy from a practitioner in the past year (Thomas and Coleman 2004).

The number of (voluntarily) registered traditional/complementary medicine practitioners was estimated to be 49,000 in 1999 (Mills and Budd 2000). This followed a smaller-scale survey in 1997, which estimated that there were 40,000 traditional/complementary medicine practitioners. The General Osteopathic Council has 3,225 registrants and the General Chiropractic Council 2,019 registrants compared to the 203,398 registrants of the General Medical Council (Allsop *et al* 2004). A few individuals have dual registration.

Spending on complementary medicine in the United Kingdom rose by 12 per cent between 1999 and 2000 to £640 million (Market Assessment International 2000). Products account for about a quarter of the market value and services three-quarters; however, twice as many people use products than services (Market Assessment International 1999).

Reimbursement

The majority of consultations with traditional/complementary medicine practitioners are funded privately by individuals; consultations funded by the National Health Service (NHS) account for less than 10 per cent of all consultations (Thomas *et al* 2001).

Access to funded traditional/complementary medicine services is highly variable between primary care trusts and depends on local purchasing policies. Around 58 per cent of primary care organisations provided some access to complementary therapies in primary care in 2000 (Bonnet 2000). In a survey of primary care organisations in the London region, 66 per cent reported that complementary medicine services were being accessed via primary care (Wilkinson *et al* 2002).

For the six established therapies included in Thomas and colleagues 2001 study (acupuncture, chiropractic, herbalism, homeopathy, hypnotherapy and osteopathy), the total estimated out-of-pocket expenditure was £450 million in England in 1998. There is currently poor information on the extent to which private health insurance companies cover complementary services, though they appear to be increasingly doing so in response to public demand.

Extent of integration with conventional medicine

Homeopathy has been integrated in the NHS since its foundation in 1948. There are currently five NHS homeopathic hospitals, in London, Glasgow, Liverpool, Bristol, and Tunbridge Wells.

In the NHS, patients are most commonly referred to acupuncture, osteopathy, chiropractic and homeopathy. The majority of referrals are in the form of recommendations to non-NHS providers, therefore, patients have to pay out of pocket. In a small-scale study of general practitioners, 30 per cent reported that they themselves practise a traditional/complementary therapy (Schmidt *et al* 2002). A more recent study found that nearly 50 per cent of general practices offered access to complementary therapies either directly or on referral (the lowest estimate was 35.6 per cent assuming all non-responders did not provide access) (Thomas *et al* 2003). In a review of studies of physician involvement in complementary medicine practice, there was great variation in the reported level of referrals to and practice of traditional/complementary therapy among doctors (Lewith *et al* 2001). Provision by hospital physicians is generally much lower than among general practitioners; one small-scale survey (response rate 23 per cent) reported less than 5 per cent (Lewith *et al* 2001).

Some health care practitioners such as doctors, nurses, midwives and physiotherapists provide complementary therapies as part of their care for patients both in the NHS and outside it, for example in hospices and the private sector. A report for the Department of Health estimated that there were 9,300 statutorily registered health professionals practising some form of traditional/complementary medicine. The report acknowledged that, due to the paucity of data, it was possible that there were up to 20,000 practising (Mills and Budd 2000).

The majority of traditional/complementary medicine services are provided in private clinics, either single-handed practices or increasingly in multi-professional practices or centres where different practitioners rent space.

Evidence-based interventions such as the use of acupuncture for lower back pain mean that there is growing but selective acceptance of traditional/complementary medicine among the medical profession. Recent guidance on standards of cancer care included recommendations about its use in palliative care (Department of Health 2000 p63; NICE 2004).

Overview of regulations

Common law has allowed traditional/complementary medicine practitioners to practise medicine without restriction in the United Kingdom, other than compliance with a number of general legal provisions (see Stone and Matthews 1996).

Chiropractors and osteopaths who continue to practice largely in the private sector gained statutory recognition and have general councils (similar to the General Medical Council for

registered medical practitioners). The Faculty of Homeopathy was established by Royal statute in 1950 as an officially recognised postgraduate medical teaching organisation (similar to the Royal Colleges). However, doctors who practise homeopathy and acupuncture are regulated by the General Medical Council. There has been considerable discussion and activity in seeking to regulate traditional/complementary medicine practitioners since the report of the House of Lords Select Committee on Science and Technology in 2000.

PRACTICE

In the United Kingdom, the practice of medicine by non-medically qualified practitioners has been permitted under common law despite the Medical Act of 1858 giving doctors exclusive rights over the title of 'registered medical practitioner'. However, if the actions of non-statutorily registered persons result in maltreatment, they may be prosecuted (Stone and Matthews 1996). Non-statutorily registered practitioners are also prohibited from claiming to cure or treat specific illnesses and medical conditions, for example, under the Venereal Diseases Act of 1917 and Cancer Act of 1939. There are no restrictions on registered health care professionals using complementary therapies other than the ability to demonstrate competence if they face a complaint before their statutory regulatory body.

Chiropractics and osteopaths successfully attained statutory recognition in 1993 and 1994. Working groups supported by the King's Fund and chaired by Lord Bingham produced reports detailing the case for regulation. The Osteopaths Bill was proposed as a Private Members' Bill and became law in May 1993. The Chiropractors Act followed a similar path and was passed on 6 May 1994. The Osteopaths Act and the Chiropractors Act have granted protection of title to these professions and the first prosecutions have been brought against non-registrants using the title falsely.

The General Chiropractic Council and the General Osteopathic Council operate along similar lines to other health care professional regulatory bodies in the United Kingdom. They are composed of elected members of their profession, lay members appointed by the Privy Council, one member appointed by the Secretary of State and three members appointed by the Education Committee of Council. Each body has a number of statutory committees that carry out the regulatory functions of the Council – an Education Committee, Health Committee, Investigating Committee and Professional Conduct Committee. In addition, they are free to constitute other committees. In order to be entered on the register a person must satisfy the Registrar that he or she has a recognised qualification; is in good (physical and mental) health; and is of good character (Allsop *et al* 2004). Both Councils are currently implementing continuing professional development requirements; failure to meet these will be seen as professional misconduct and could result in suspension or removal from the register.

Following the recommendations of the House of Lords Select Committee on Science and Technology (2000), the Prince's Foundation for Integrated Health, in partnership with the Department of Health, worked to establish working groups to develop proposals for the statutory regulation of the acupuncture and herbal medicine professions (House of Lords Select Committee on Science and Technology 2000). The Foundation published two reports in September 2003 on behalf of the Acupuncture Regulatory Working Group and the Herbal Medicine Regulatory Working Group. Each made recommendations on the regulatory framework and, in the case of herbal medicine, also on the reform of medicines legislation around medicines used by herbal practitioners (Acupuncture Regulatory Working Group 2003; Herbal Medicine Regulatory Working Group 2003). The Acupuncture Regulatory

Working Group proposed a single Acupuncture Council to be established along the same lines as the General Osteopathic Council and General Chiropractic Council. It would regulate the practice of acupuncturists and grant protection of title to registrants. Health care professionals already regulated by another statutory body and wishing to practise acupuncture would be listed (under a separate membership tier), but the responsibility for the regulation of their acupuncture practice would remain with their 'primary' regulator, such as the General Medical Council. The Herbal Medicine Regulatory Working Group proposed an umbrella Complementary and Alternative Medicine Council, which would regulate both herbal medicine and acupuncture practitioners. This was the proposal on which the Department of Health subsequently consulted in March 2004 (Department of Health 2004).

The recommended Complementary and Alternative Medicine Council would solve one of the major problems that arose during the Herbal Medicine Regulatory Working Group deliberations – how to regulate traditional Chinese medicine practitioners, for whom both acupuncture and herbal medicine are integral parts of their practice. Traditional Chinese medicine practitioners were concerned that they would be required to register with two bodies in future, which would lead to two titles (neither of which would adequately describe their profession) as well as the requirement to pay two registration fees. There were also concerns expressed by the medical acupuncturists that the Department's consultation had not accepted the proposal to have a separate listing of those who were already statutorily registered but wished to practise acupuncture and use the title 'acupuncturist'. The results of the consultation were published in February 2005 (Department of Health 2005). The government was due to bring forward a Section 60 Order under the provisions of the Health Act 1999 in order to create a Complementary and Alternative Medicine Council. However, this was delayed by the wider review of professional regulation which reported in 2006 (Department of Health 2006; Chief Medical Officer 2006). The White Paper which followed did little to clarify the likely date by which statutory regulation will be in place (Department of Health 2007).

For the majority of complementary therapies a robust system of voluntary self-regulation is the preferred government option. Twelve different complementary health care groups have been of developing arrangements for regulation of their profession with support from the Prince's Foundation for Integrated Health's regulation programme. A report examining options for a federal-style structure was commissioned by the Foundation and a consultation was carried out in early 2006 (Stone 2005). During 2007 a Working Group set up by the Foundation drafted proposals for a voluntary federal regulator to be established in 2008 (Foundation for Integrated Health 2008).

EDUCATION AND TRAINING

The majority of traditional/complementary medicine courses are offered by private training colleges such as the Anglo-European College of Chiropractic in Bournemouth established in 1965, the McTimoney Chiropractic School established 1972, and the Witney School established 1984. Some courses are recognised by universities; for example, in 1988 the Anglo-European College became the first complementary medicine college to offer a validated degree course in the United Kingdom. In recent years more courses have been available at universities and colleges of further education; for example, the first degree-level course for herbalists was established at Middlesex University.

Some courses are accredited by professional associations or regulatory bodies and the resultant qualification will be sufficient to gain membership or entry to a register. For

example, the British Acupuncture Accreditation Board has established standards of training and accredits courses for non-medical acupuncturists that allow graduates access to the British Acupuncture Council register. A number of complementary therapies have established national occupational standards, which set out the minimum skills required in order to practise a therapy. A number of nationally recognised vocational-related qualifications in complementary medicine, at the diploma level, have recently been accredited by the Qualifications and Curriculum Authority, the regulatory body for publicly funded qualifications. These qualifications, normally offered by further education colleges, are linked to the agreed national occupational standards.

Courses vary in their scope and may offer practitioner training, academic theory, professional practice, self development or simply an introduction to the therapy (Williams 2003); for example, the University of Westminster offers herbal medicine and homeopathy as part of a general Health Sciences degree, and the University of Salford, the University of Westminster and Thames Valley University offer general qualifications in complementary medicine. Not all complementary medicine qualifications available within higher education are professionally accredited and the practitioner element of courses varies.

Data on university entry since 2002 includes a category of courses under the title 'complementary medicine', which encompasses osteopathy, chiropractic, chiropody, Chinese medicine, herbalism, acupuncture, homeopathy, aromatherapy, hypnotherapy and reflexology. In 2003–04, the number of students accepted on to complementary therapy courses rose by 9.1 per cent, similar to the overall growth rate of 9 per cent for all subjects allied to medicine and much higher than the 3.8 per cent growth in medicine and dentistry. The majority of students are studying at degree level (73 per cent in 2004, up from 63 per cent in 2002) and the majority are women (91 per cent of all applicants in 2004 and 86 per cent of those accepted).

In *Tomorrow's Doctors*, the General Medical Council made recommendations about the curriculum content for undergraduate medical education. It proposed that graduates 'must be aware of the existence and range of [alternative and complementary] therapies, why some patients use them, and how these might affect other types of treatment that patients are receiving' (General Medical Council 2003 p 11). Consequently, medical school curricula are being redesigned and existing elective courses are likely to become core components for all students. Qualified doctors and other statutorily registered health care professionals wishing to specialise in homeopathy can take specialist exams set by the Faculty of Homeopathy: similarly, the British Medical Acupuncture Society offers training courses and examinations that statutorily registered health care professionals may take.

Summary

Osteopaths and chiropractors achieved statutory recognition in 1993 and 1994 respectively through the passage of the Osteopaths Act and the Chiropractors Act. The government consulted on proposals for the statutory regulation of herbalists and acupuncturists in 2004, but legislation has not yet come before parliament. Otherwise complementary medicine practitioners are free to practise and are not subject to any government regulation. Many have developed their own voluntary self-regulating bodies. The Prince's Foundation for Integrated Health is establishing a federal system of voluntary regulation in 2008 which will require full public and professional liability insurance.

United States of America

Background

In the United States of America, a large variety of complementary medicine approaches and practices based on healing traditions from around the world is available. Academic and popular interest in complementary therapies developed in the 1970s and their use has grown dramatically since then (Eisenberg 1998). The use of traditional Navajo medicine by the American Indian population long precedes this.

Statistics

Demand for complementary therapies in the United States of America grew significantly during the 1990s though recent estimates suggest use stabilised between 1997 and 2002 (Tindle et al 2005). Reported annual prevalence of complementary medicine rose from 33.8 per cent of the total population in 1990 to 42.1 per cent in 1997, an increase of 25 per cent (Eisenberg et al 1998). In 2002, 36 per cent of adults reported having used some form of complementary therapy within the past 12 months (Barnes and Powell-Griner 2004). The National Health Interview Survey in 2002 also reported that the most commonly used therapies in the past 12 months were natural products (18.9 per cent), deep breathing exercises (11.6 per cent), meditation (7.6 per cent), chiropractic care (7.5 per cent), yoga (5.1 per cent), massage (5.0 per cent) and diet-based therapy (3.5 per cent) (Barnes and Powell-Griner 2004).

In 1997, 629 million visits to complementary medicine providers were reported – more than the 386 million visits to primary care physicians (Eisenberg 2003) and by 2002 it was estimated that there were 70,000 licensed chiropractors, 14,000 licensed acupuncturists who were not medical doctors, 3,000 medical doctors with a specialisation in acupuncture, 260–290,000 massage therapists, 6,000 licensed homeopaths and 1,500 licensed naturopathic physicians (Dower 2003; WHO 2005b).

Out-of-pocket expenditures for complementary medicine professional services in 1997 were estimated at \$12.2 billion, exceeding the total out-of-pocket expenditures for all US hospitalisations. In addition, total out-of-pocket expenditures relating to complementary therapies were conservatively estimated at \$27 billion – a figure comparable to the projected out-of-pocket expenditures for all physician services (Committee on the Use of Complementary and Alternative Medicine by the American Public 2005).

Reimbursement

For the most part, complementary therapies in the United States of America are not reimbursed by private third-party insurers (Eisenberg 2003). However, 50 per cent of health maintenance organizations (HMOs) and 75 per cent of private health insurance plans do cover chiropractic services (Meeker and Haldeman 2002). If covered, high deductibles, co-payments and stringent limits to the number of visits and dollar coverage may apply. In addition, a survey conducted in 1998/9, found that 31 per cent of HMOs offered cover for acupuncture, and other HMOs intended to include it in the future. However, coverage may be limited in amount, type of benefit and type of provider (for example, it can be restricted to medical doctors who also provide acupuncture) (Dower 2003).

Medicare and Medicaid provide some reimbursement for alternative treatments for certain specified conditions. Medicare cover includes chiropractic and massage therapy for back

problems, and biofeedback for muscle re-education. Acupuncture is currently under consideration (WHO 2005b). Medicaid programmes reimburse at least one form of complementary therapy in 75 per cent of the states, most commonly chiropractic, biofeedback or acupuncture (WHO 2005b).

For most complementary therapies, however, patients pay out-of-pocket. A survey conducted in 1991 found that complementary medicine users collectively spent about \$14 billion dollars, of which 75 per cent (\$10.5 billion) were paid out-of-pocket on complementary medicine treatment (Eisenberg *et al* 1993). By 1997, the proportion of complementary medicine users in the population was estimated at 35 per cent and total spending on complementary therapies had increased to \$21 billion. However, the proportion paid out of pocket fell to 57.1 per cent (\$12 billion) (Ruggie 2005). Use of complementary therapies was found to be higher among those with higher incomes and better education (Eisenberg 1993)

There is substantial variation between the states in terms of access to and reimbursement of complementary medicine treatments. In the District of Columbia, state laws have mandated that health plans provide access to all licensed health professionals, including massage therapists, since 1995 (Cherkin *et al* 2002). Californian HMOs are more likely to reimburse for acupuncture as well as nutrition counselling, chiropractic, massage and herbal medicine as compared to an aggregate of 13 western states (Hughes 2001).

Overview of regulations

Regulatory controls surrounding complementary medicine in the United States of America involve six areas: licensing, scope of practice, malpractice, professional discipline, third-party reimbursement and access to treatments. State laws govern almost all aspects of the first five and federal food and drug laws largely regulate the sixth. The main purpose of the legislation and regulation are to protect consumers against fraud and ensure patient protection against harm or injury, maximise patient access to information, products and practitioners of their choice, and encourage consumers to make informed decisions.

Malpractice laws also exist in order to safeguard practitioners' liability when deviation from standards of care causes injury to patients. There is debate as to whether a medical doctor should be held responsible for malpractice of the complementary medicine practitioner when referring patients to these specialists (Cohen and Eisenberg 2002).

All states have agencies that license, certify or register some complementary medicine practitioners, and have a variety of ways of interfacing with unlicensed practitioners at state level. The Food and Drugs Administration regulates on the federal level devices used in complementary therapies such as acupuncture needles (Ruggie 2005). Dietary supplements are regulated as 'food' under the federal product law, the Dietary Supplement and Health Education Act, and are freely accessible.

LICENSING

Licensing and exemption from licensing laws vary greatly between states. States often require licensure of chiropractors, homeopaths, massage therapists and naturopathic physicians. In 2003, chiropractors had licensure in every state. At least half of the states authorised the practice of massage therapy and at least half authorised the practice of traditional oriental medicine. At least 12 states licensed naturopaths (Cohen 2003). Other complementary medicine specialists, such as herbalists, lay homeopaths, unlicensed naturopaths,

hypnotherapists, Ayurvedic practitioners, energy healers, mind-body practitioners and reiki practitioners practise freely without licence, or practise under complementary and alternative health care exemption laws or are prohibited from practising – depending on which state they are in. Six states in America have broad-based exemption laws for unlicensed practitioners. An additional 12 states introduced legislation in 2006 to exempt specific complementary and alternative medicine practitioners from licensure requirements. For example, Minnesota exempts such practitioners from licensure or registration requirements as long as they practise within the parameters of the safe harbour law and give out proper disclosures. In states where a licence is mandatory for complementary medicine practice, there is variation in the type of licence required, with some states specifying a title licence or registration while others endorse mandatory licensing (Eisenberg *et al* 2002).

Legal recognition of complementary medicine providers through licensure usually ensues after extensive debate over the scope of practice, prescriptive authority and role of physician supervision, all which have implications for the reimbursement and coverage of complementary therapies (Eisenberg *et al* 2002).

Holistic or integrative medicine doctors

‘Holistic’ medical doctors apply training and expertise in complementary medicine along with conventional medical knowledge. Although historically medical doctors could lose their licences for acting outside the ‘prevailing and acceptable standards of care’, 27 states have passed legislation preventing ‘holistic’ medicine doctors from being disciplined solely for the use of complementary medicine. In addition some Medical Examiner State Boards have proposed and passed administrative rules regarding the complementary medicine practice for medical doctors.

Chiropractic

Chiropractic is licensed in every state (Eisenberg *et al* 2002). According to survey data from the 2002 National Health Interview Survey, chiropractors are used more often than any other alternative therapy provider group (Barnes and Powell-Griner 2004).

The process of licensure varies from state to state but generally requires a pre-chiropractic education, graduation from an accredited chiropractic college, passing of an examination (most boards rely on a four-part examination offered by the National Board of Chiropractic Examiners), background investigation and evidence of an understanding of state law (www.fclb.org/Q&A.htm#Q2). Most states also require annual proof of continuing education to renew a licence (Meeker and Haldeman 2002).

Third party insurers in America reimburse practitioners who are defined as ‘primary care providers’. The American Chiropractic Association defines chiropractors as ‘first-contact gatekeepers’ for patients in the primary health care system with neuro-musculoskeletal conditions. In Illinois, for example, chiropractors who meet rigorous standards, including review by a credentialing committee composed of conventional physicians, can receive reimbursement under a Blue Cross/Blue Shield plan as primary care providers. However, the status of chiropractors as primary care providers remains highly controversial in many states, and is by no means universally accepted (Eisenberg *et al* 2002).

Acupuncture and traditional oriental medicine

In 2002, acupuncturists were licensed in 42 states and in the District of Columbia (Eisenberg *et al* 2002). Almost all states licensing acupuncturists require passing a national written examination offered by the National Certification Commission for

Acupuncture and Oriental Medicine. Also, 12 states require passing the Commission's practical examination (Eisenberg *et al* 2002). In addition, approximately a quarter of the states licensing acupuncturists require prior referral from, diagnosis by, or collaboration with a licensed medical doctor (Eisenberg *et al* 2002). In 31 states, medical or dental licensure explicitly includes licence to practise acupuncture without any further training (Eisenberg *et al* 2002).

The scope of practice for acupuncturists and doctors of oriental medicine varies between states. Definitions of scope of practice may include magnets, laser biostimulation, cupping, oriental bodywork (such as shiatsu or acupressure), dietary counselling, reflexology and other treatments in addition to needling. Some states specifically permit use of Chinese herbal medicine, while at least one state (Illinois) prohibits use of herbal preparations (Eisenberg *et al* 2002). Furthermore, while some states (Colorado, for example) prohibit the use of Western medical diagnostic tests and procedures by doctors of oriental medicine, New Mexico's Board of Oriental Medicine authorises doctors of oriental medicine to order computed tomography scans, magnetic resonance imaging and radiographs (Eisenberg *et al* 2002).

Massage therapy

Currently, 33 states and the District of Columbia regulate massage therapy (AMTA 2007). In 17 states massage is practised freely, sometimes regulated by local city ordinances. Some states, including California and Massachusetts, do not license massage therapists at all (Eisenberg *et al* 2002). Debate exists as to whether licensing should be mandatory, required in order to use a title such as 'massage therapist', or whether therapists should merely be required to register with a state agency. Increasingly, states are demanding that massage therapists comply with a number of requirements as a basis for licensure; these include having a minimum of 500 hours of in-class, supervised training at an accredited institution, passing the National Certification Board for Therapeutic Massage and Bodywork national certification examination, maintaining specified continuing education requirements and carrying minimum malpractice insurance.

Homeopathy

Homeopathy is licensed by only three states (Arizona, Connecticut and Nevada), though it is widely practised by a variety of practitioners. These states will license the practitioners only if they already have licence to practise as medical doctors. Arizona and Nevada additionally license homeopathic assistants, who can perform medical services under the supervision of a homeopathic physician (Eisenberg *et al* 2002).

Naturopathy

Naturopathic physicians are licensed by 12 states, in which formal training and a qualification in naturopathic medicine is required for licensure (WHO 2005b). As with other complementary therapies, the scope of practice for naturopathy varies widely by state; for example, naturopaths with appropriate specialty training can assist in childbirth in Montana, New Hampshire, Oregon and Utah. In some states naturopaths may also practice acupuncture (Eisenberg *et al* 2002). Traditional naturopaths and herbalists practise in most states without licensure but run the risk of being charged with unlicensed practice of medicine unless the state has exemption laws or does not require licensing at all.

EDUCATION

Educational requirements for licensed complementary medicine practitioners are determined at the state level and vary at least as much as legal requirements. Unlicensed

practitioners do not have educational limitations and have a wide variety of educational training and backgrounds.

In its 2002 report, the White House Commission on Complementary and Alternative Medicine found that 91 of the 125 American allopathic medical schools included complementary medicine in the required conventional medical course, 64 offered complementary medicine as stand-alone elective courses, and 32 included complementary medicine as part of an optional course. Most of these courses were in acupuncture, herbal medicine, homeopathy, manual healing techniques, nutritional supplement therapy and spirituality. Courses varied in content, format and requirements (White House 2002). The White House Commission recommended integrating complementary medicine into conventional medical training, but also made recommendations to ensure students of complementary medicine are provided with sufficient biomedical knowledge during their training.

Chiropractic

National training and educational standards are most extensively developed for chiropractors. All 16 American chiropractic colleges are accredited by the Council on Chiropractic Education, which itself is recognised by the Department of Education although it is not a governmental body (Eisenberg *et al* 2002). The Federation of Chiropractic Licensing Boards has developed uniform standards of education and examination, including the National Board of Chiropractic Examiners' four-part standard national certification examination; parts one to three are required for licensing by almost all states (Eisenberg *et al* 2002).

America's chiropractic curricula have an average of 4,820 classroom and clinical hours (usually lasting four to five years), of which 30 per cent are spent in basic sciences and 70 per cent in clinical sciences and internship (with an emphasis on anatomy and physiology). Specialty training is available in two or three year postgraduate residency programmes in orthopedics, neurology, radiology, rehabilitation, sports and pediatrics (Meeker and Haldeman 2002). Colleges require at least four years of academic education before students can qualify for licensure examinations. Out of the students 50 per cent have a prior Bachelor degree when entering a chiropractic training institution (Meeker and Haldeman 2002).

Acupuncture and traditional oriental medicine

The Accreditation Commission for Acupuncture and Oriental Medicine is the agency recognised by the Department of Education for the accreditation of professional programmes in acupuncture and oriental medicine. There are 54 schools and colleges of acupuncture and oriental medicine which have accredited or candidacy status with the Commission (www.acaom.org).

Curricula include three years of training, including a specified number of hours of clinical training. Students who want to practise as doctors of oriental medicine are required to take additional credits in herbology (www.acaom.org). Some states also require tuition in anatomy, physiology and pathology; 17 states have no specific requirements (Eisenberg *et al* 2002). All states, with the exception of Louisiana, require acupuncturists who are not medical doctors to pass a state examination or an examination accredited by the National Certification Commission for Acupuncture and Oriental Medicine.

Acupuncturists with a prior medical doctor or dentist qualification are required to have little or no further specific training in order to be able to practise acupuncture in most states (Eisenberg *et al* 2002). However, the American Board of Medical Acupuncture administers a board certification examination for those who chose to take it. Only in Hawaii are medical doctor acupuncturists required to pass exactly the same examination as non-medical doctor practitioners (Eisenberg *et al* 2002). Two states (Florida and New Mexico) specify that acupuncturists also provide primary care (Eisenberg *et al* 2002).

A number of cultures in the United States of America use acupuncture as part of their traditional medicine. This is generally practised by elders of the community, who do not undergo conventional state-mandated education and examinations – which poses a licensing problem as states have not provided specific exemptions for these practitioners.

Massage therapy

Most of the states that regulate practitioners of massage therapy require therapists to have graduated from a school accepted by the Commission on Massage Therapy Accreditation or a school with an equivalent programme (Eisenberg *et al* 2002). Training standards vary between 100 and 1,000 hours of tuition; the majority of states require a minimum of 500 hours (Eisenberg *et al* 2002). States in which massage therapy is exempted from licensing laws mandate that therapists disclose their education and training to the client.

Homeopathy

Of the three states that license medical doctors to practice homeopathy, Nevada requires six months of postgraduate training, Arizona requires 300 hours of training and Connecticut specifies no educational requirements (Eisenberg *et al* 2002).

Naturopathy

In states where naturopathy is licensed, Naturopathic Physician Licensing Examinations include basic science examinations (except for two states) and clinical examinations covering medical diagnosis, botanical medicine, pharmacology, minor surgery, psychology and so on (Eisenberg *et al* 2002). A four-year postgraduate programme for naturopathy is available in some states, the first two years of which focus on natural science, with years three and four emphasising clinical sciences and natural therapies.

REQUIREMENTS FOR CONTINUING EDUCATION

For many of the regulated complementary medicine specialties, specific requirements with regard to continuing medical education apply. As at 2002, 48 states and the District of Columbia required continuing medical education for chiropractors and 16 states required it for non-medical acupuncturists and doctors of traditional oriental medicine. A few states required massage therapists and naturopathic physicians to take courses in continuing education. The only state specifying continuing medical education for homeopaths was Nevada (Eisenberg *et al* 2002).

Summary

In the United States of America, the demand for complementary therapies has increased rapidly in the past decade. Regulation of practitioners primarily takes place on the state level, therefore requirements and standards of training vary significantly. Specific regulatory requirements exist in some states, namely for holistic medical doctors in 27 states, chiropractors in all states, homeopaths in three states, naturopathic doctors in 12 states, acupuncturists and practitioners of traditional oriental medicine in 42 states and massage therapists in 36 states. In general, other complementary medicine practitioners are

unregulated and may practise freely under state law or under complementary and alternative medicine state exemption laws, or may be prohibited from practice by the state.

Legal recognition of complementary medical practitioners can have important implications and increases the probability of reimbursement by third parties. Providers lacking legal recognition may risk prosecution for the unlicensed practice of medicine, or for unlicensed practice of another profession such as massage therapy or psychology. Furthermore, physician referrals to both licensed and unlicensed complementary medicine providers can potentially increase malpractice liability (Eisenberg *et al* 2002). Even in the absence of specific regulation, these hazards may influence the practice and use of complementary medicine. The need for regulation, credentialing and integration of complementary therapies into the health care system in the United States is increasingly recognised.

Annex I: Extract from case study guidelines

Background

The main aim of the report is to provide an overview of how 16 different countries regulate the practice of traditional medicine and complementary and alternative medicine. The focus of the report is on government policies, legislation and other rules that govern individuals engaged in therapeutic activity using either traditional medicine or complementary and alternative medicine. It is not concerned with the regulation of the products used.

The report will compile up-to-date factual information on the situation in each country, the main focus being on the current situation. However, if there have been changes or debates within the last five years or if there are current discussions or plans to regulate in the future these should be mentioned. The country information will then be used as the basis for an analysis of the different regulatory models and approaches identified.

Scope

Given the historical and cultural specificity of many complementary and alternative medical therapies, it is not possible to provide an exhaustive list of those therapies that will be covered in the report. In fact the definitions and scope of traditional, complementary and alternative medicine used in the country under examination will be taken as the basis for the analysis. You might wish to refer to the attached glossary for reference. It draws on definitions used in the House of Lords Report and by the National Library of Medicine. The absence of any policies in relation to therapies that are widely practised and utilised in the country should be noted. However, the main focus should be on those therapists to which official policies are directed.

Questions

- What regulations exist that apply to the practice of traditional, complementary and alternative medicine?
- To what do the standards apply? Are these concerned with the standards of training/education, standards of practice, or standards of information for consumers?
- What status do these regulations have, for example, primary or secondary legislation or administrative rules?
- When were they introduced?
- What is the stated rationale for each regulation?
- How have they been implemented? In particular, who is responsible for setting standards, monitoring and enforcement?
- Have they been implemented fully?
- Do they apply to all or only some specific complementary and alternative medicine practitioners, to orthodox health care professionals who practise these therapies, only those working in the public sector, to all health care practitioners (including orthodox), or are they generic regulations that apply to all service providers (for example, trading standards)? If there have been any evaluations of the impact of the regulation, please

include details of these – in particular if there is data on the impact on:

- integration with conventional medicine
- public protection and patient safety
- public confidence and informed choices for patients
- costs to the government or regulator, costs to the practitioners (training, registration fees, investment in equipment, facilities), cost of consultation to the patient and so on
- access and availability (total number) of practitioners, including geographical distribution and numbers working in the public sector.

It is unlikely that this information will be readily available. You might, however, come across public discussions that mention these issues.

Structure

The case studies should broadly follow this structure:

BACKGROUND

Some brief factual information about the types of traditional, complementary and alternative medicine used in the country and level of use, number of practitioners, level of integration with orthodox medicine, public/private mix of funding and delivery of services.

OVERVIEW OF REGULATIONS

A summary of the regulations that apply to traditional, complementary and alternative medicine practice. If regulation is devolved in a federal system the variation should be highlighted here.

REGULATION OF EDUCATION AND TRAINING

Taking each specific regulation that applies to education and training, answer detailed questions.

REGULATION OF PRACTICE

Taking each specific regulation that applies to practice (for example, standards of practice, ethical codes and facilities), answer detailed questions.

INFORMATION ENHANCING POLICIES

Taking each specific regulation that applies to information for consumers, answer detailed questions.

SUMMARY

Highlight key features of the regulatory approach to traditional, complementary and alternative medicine practice and any evaluations/discussion of impacts.

Useful sources

WHO (2001). *Legal Status of Traditional Medicine and Complementary/Alternative Medicine: A worldwide review*. Available online at:

http://whqlibdoc.who.int/hq/2001/WHO_EDM_TRM_2001.2.pdf

Authors should search the websites of government departments and the published literature (a useful place to begin is ISI, which covers public policy and social science literature including health policy). Websites of practitioner associations and specialist

non-governmental organisations might be useful in some countries where these are well established or have a long tradition (but beware of websites of small practitioner associations).

In addition, each author will be provided with relevant resources and references already obtained by the project leader and from WHO.

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