Traditional Medicine

Shamsuzzoha B. Syed, MD MPH DPH(Cantab)
Stephen A. Haering, MD MPH

Johns Hopkins Bloomberg School of Public Health
December 2007

Prepared as part of an educational project of the Global Health Education Consortium and collaborating partners
Learning objectives

1. Articulate definitions of traditional medicine (TM)
2. Enumerate the level of global use of TM
3. Discuss reasons for the popularity of TM
4. Articulate a classification of TM
5. Discuss safety, efficacy, and quality issues
6. Discuss policy & regulatory framework issues
7. Discuss some case studies on the use of TM
8. Discuss possible future developments
Module outline

• Definitions
• Level of global TM usage
• Reasons for TM popularity
• Classification of TM
• Safety, Efficacy, and Quality
Module outline (continued)

• Rational Use of TM
• Policy and regulatory frameworks
• Case study on the use of TM in rural Bangladesh
  – Traditional healers and severe mental illness
  – Generating evidence on informal care
Definitions: What is traditional medicine?

The World Health Organization states:
“Traditional medicine refers to health practices, approaches, knowledge and beliefs incorporating plant, animal and mineral based medicines, spiritual therapies, manual techniques and exercises, applied singularly or in combination to treat, diagnose and prevent illnesses or maintain well-being.”
Definitions: Ten core terms

1. Traditional medicine (TM)
2. Complementary/alternative medicine (CAM)
3. Herbal medicines
4. Herbs
5. Herbal materials
6. Herbal preparations
7. Finished herbal products
8. Traditional use of herbal medicines
9. Therapeutic activity
10. Active ingredient
Global TM usage is widespread and growing

High usage in various parts of the developing world:
  – In Africa up to 80% use TM
  – In China, 40% of delivered health care is TM
  – In India, 65% of the population in rural areas use traditional medicine to help meet their primary health care needs
  – In many other Asian countries TM widely used
    • 60-70% of allopathic doctors in Japan prescribe TM
  – Latin America also reports high levels of TM usage
    • 71% in Chile; 40% in Columbia

Use of TM is high in many countries in the developing world. Data presented in slides from:

Level of global TM usage

• Usage in the developed world is also high and increasing
• Percentages of populations who have used CAM at least once:
  – Australia 46%; Canada 70%; USA 48%; Belgium 31%; and France 49%
• In the UK 40% of all GPs offer some form of CAM referral or access
• In the USA one study concluded that use of at least 1 of 16 alternative therapies during the previous year was 42% in 1997 – visits to CAM providers now exceeds by far the number of visits to all primary care physicians in the US
• A joint NIH/CDC study of 2004 provided detailed information on CAM usage in the USA

See Notes
Percentage of population which has used CAM at least once in selected developed countries


Figure source:

- Availability.
- Access issues.
- Affordability.
- Confidence in the ability of TM to manage debilitating/incurable diseases.
- Familiarity with practitioners.
- Integration with community belief systems.

- Availability data in Africa – in Tanzania, Uganda and Zambia, researchers have found a ratio of TM practitioners to population of 1:200-1:400 (this contrast with the availability of allopathic practitioners, where the ratio is typically 1:20,000 or less.
- USAID data indicates that traditional practitioners outnumber allopathic practitioners by 100 to 1.
- Allopathic practitioners in Africa are often located primarily in cities or other urban areas.
- TM is often the only affordable source of health care – especially for the poorest patients. Traditional practitioners can often be paid in kind and/or according to the wealth of the client.
- Often, the principals of TM are embedded within the community and traditional practitioners are well known and respected in their communities.
Reasons for TM popularity:

- Concern regarding adverse effects of chemicals
- Questioning the assumptions of allopathic medicine
- Increased access to health information
- Changing values and reduced tolerance of paternalism
- Chronic diseases require holistic approach
- Perceived low risks of TM
- Consumer satisfaction with the level of inter-personal care provided

The fact that CAM usage is high and increasing in developing countries indicates that cost and tradition are not the only reasons for the use of traditional medicine. Many inter-related factors are contributing to the high levels of CAM use – some of these factors are mentioned in the slide.

Health systems in many developing countries are struggling to maintain continuity of care for the populations they serve – this fragmentation of care is occurring at the same time as high levels of chronic diseases that necessitate such continuity. CAM has been reported to provide a high level of quality in terms of inter-personal care. This can be postulated as one of the reasons for the popularity of CAM.
Any attempt to classify traditional medicine is hazardous, as the field is continuously emerging and many traditional practitioners resist formalized classification. A good starting point is provided by the WHO, as outlined in the table in the slide. One should note, however, the absence of multiple traditional healing practices in Africa and South America. Each slide that follows will provide some brief information on the therapies mentioned in the WHO table. Table source: WHO Traditional Medicine Strategy 2002-2005. Geneva. 2002. Publication number WHO/EDM/TRM/2002.1. Available at: [http://whqlibdoc.who.int/hq/2002/WHO_EDM_TRM_2002.1.pdf](http://whqlibdoc.who.int/hq/2002/WHO_EDM_TRM_2002.1.pdf)

<table>
<thead>
<tr>
<th>Commonly used TM/CAM therapies and therapeutic techniques</th>
<th>Chinese medicine</th>
<th>Ayurveda</th>
<th>Unani</th>
<th>Naturopathy</th>
<th>Osteopathy</th>
<th>Homeopathy</th>
<th>Chiropractic</th>
<th>Others</th>
</tr>
</thead>
<tbody>
<tr>
<td>Herbal medicines</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td></td>
<td>●</td>
<td></td>
<td>○</td>
</tr>
<tr>
<td>Acupuncture/acupressure</td>
<td>●</td>
<td></td>
<td></td>
<td></td>
<td>●</td>
<td>●</td>
<td></td>
<td>○</td>
</tr>
<tr>
<td>Manual therapies</td>
<td>Tuina*</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td></td>
<td>●</td>
<td>Shitau*</td>
<td></td>
</tr>
<tr>
<td>Spiritual therapies</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td></td>
<td></td>
<td>Hypnosis, healing meditation</td>
<td></td>
</tr>
<tr>
<td>Exercises</td>
<td>Qigong*</td>
<td>Yoga</td>
<td></td>
<td>Relaxation</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- ● — commonly uses this therapeutic technique
- ○ — sometimes uses this therapeutic technique
- ● — uses therapeutic touch

* For example, many internal TM systems in Africa and Latin America use herbal medicines.
* For example, in Thailand, some commonly used TM therapies incorporate acupuncture and acupressure.
* Type of manual therapy used in traditional Chinese medicine.
* Refers to manual therapy of Japanese origin in which pressure is applied with thumbs, palms, etc., to certain points of the body.
* Component of traditional Chinese medicine that combines movement, meditation, and regulation of breathing to enhance the flow of vital energy (qi) in the body to improve circulation and enhance immune function.
Classification of TM/CAM: Chinese Medicine

“Traditional Chinese medicine (TCM) is an ancient medical system that takes a deep understanding of the laws and patterns of nature and applies them to the human body. TCM is not "New Age," nor is it a patchwork of different healing modalities. TCM is a complete medical system that has been practiced for more than five thousand years.”

(Traditional Chinese Medicine – World Foundation)
Classification of TM/CAM: Ayurveda

“Life in Ayurveda is conceived as the union of body, senses, mind and soul. The living man is a conglomeration of three humours (Vata, Pitta & Kapha), seven basic tissues (Rasa, Rakta, Mansa, Meda, Asthi, Majja & Shukra) and the waste products of the body such as faeces, urine and sweat. Thus the total body matrix comprises of the humours, the tissues and the waste products of the body. The growth and decay of this body matrix and its constituents revolve around food which gets processed into humours, tissues and wastes. Ingestion, digestion, absorption, assimilation and metabolism of food have an interplay in health and disease which are significantly affected by psychological mechanisms as well as by bio-fire (Agni).”

(Source – AYUSH, Ministry of Health & Family Welfare, India)
Classification of TM/CAM Unani

• Originated in Greece, based on teachings of Hippocrates and Galen.
• Developed into an elaborate Medical System by the Arabs (Rhazes, Avicenna, Al-Zahravi, Ibne-Nafis and others).
• Unani treatment is based on natural diagnosis methods.
• Mainly dependent on the temperament (Mizaj) of the patient, hereditary condition and effects, different complaints, signs and symptoms of the body, external observation, examination of the pulse (Nubz), urine and stool etc.
• Unique and special treatment methods like Dieto therapy (Ilaj-bil-Ghiza), Climatic therapy (Ilaj-bil-Hawa), Regimental therapy (Ilaj-bit-Tadbir), make it a remarkable and popular system.

(Source – AYUSH)

The Department of Ayurveda, Yoga & Naturoptahy, Unani, Siddha and Homeopathy (AYUSH) of the Ministry of Health and Family Welfare of India has a section on Unani at: http://indianmedicine.nic.in/unani.asp

The American Institute of Unani Medicine provides a wide range of further information on Unani at http://www.unani.com
Classification of TM/CAM: Naturopathy

“Naturopathy is a system of healing science stimulating the body’s inherent power to regain health with the help of five great elements of nature – Earth, Water, Air, Fire and Ether. Naturopathy is a call to "Return to Nature" and to resort to simple way of living in harmony with the self, society and environment. Naturopathy provides not only a simple practical approach to the management of diseases, but a firm theoretical basis which is applicable to all the holistic medical care and by giving attention to the foundations of health.”

(Source - AYUSH)

The Department of Ayurveda, Yoga & Naturoptahy, Unani, Siddha and Homeopathy (AYUSH) of the Ministry of Health and Family Welfare of India has a section on Naturopathy at: http://indianmedicine.nic.in/naturopathy.asp
Classification of TM/CAM: Osteopathy

“Developed 130 years ago by physician A.T. Still, osteopathic medicine is one of the fastest growing healthcare professions in the U.S. and brings a unique philosophy to traditional medicine. With a strong emphasis on the inter-relationship of the body's nerves, muscles, bones and organs, doctors of osteopathic medicine, or D.O.s, apply the philosophy of treating the whole person to the prevention, diagnosis and treatment of illness, disease and injury.”

(American Osteopathic Association)

The American Osteopathic Association website provides a wealth of information: http://www.osteopathic.org/index.cfm
Classification of TM/CAM: Homeopathy

• Homeopathy seeks to stimulate the body's defense mechanisms and processes so as to prevent or treat illness.
• Treatment involves giving very small doses of substances called remedies that, according to homeopathy, would produce the same or similar symptoms of illness in healthy people if they were given in larger doses.
• Treatment in homeopathy is individualized (tailored to each person). Homeopathic practitioners select remedies according to a total picture of the patient, including not only symptoms but lifestyle, emotional and mental states, and other factors.

(Source – National Center for Complementary and Alternative Medicine, National Institutes of Health, United States).
Classification of TM/CAM: Chiropractic

• Focuses on disorders of the musculoskeletal system and the nervous system, and effects of these disorders on general health.
• Chiropractic care is used most often to treat neuromusculoskeletal complaints, including but not limited to back pain, neck pain, pain in the joints of the arms or legs, and headaches.
• Chiropractors or chiropractic physicians – practice a drug-free, hands-on approach to health care.
• Chiropractors have broad diagnostic skills and are also trained to recommend therapeutic and rehabilitative exercises, as well as to provide nutritional, dietary and lifestyle counselling.
(Source – American Chiropractic Association)

The American Chiropractic Association provides a large amount of information at: http://www.amerchiro.org/index.cfm
Classification of TM/CAM: Therapeutic techniques

• Many therapies and therapeutic techniques are common to more than one TM system.

• These include:
  – Herbal medicines
  – Acupuncture and acupressure
  – Manual therapies
  – Spiritual therapies
  – Exercises

Classification of TM/CAM
An alternative NIH classification

• Four domains:
  1. Mind-Body Medicine
  2. Biologically Based Practices
  3. Manipulative and Body-Based Practices
  4. Energy Medicine
     • Biofield therapies
     • Bioelectromagnetic-based therapies

• Whole medical systems, cut across all four domains.
Key issues: Safety - efficacy and quality

The WHO articulates 6 challenges in considering these issues:

1. Lack of research methodology
2. Inadequate evidence-base for TM/CAM therapies and products
3. Lack of international and national standards for ensuring safety, efficacy, and quality control
4. Lack of adequate regulation and registration of herbal medicines
5. Lack of registration of TM/CAM providers
6. Inadequate support for research

A discussion of these issues is found on page 21 of the report.
Key issues: Safety - efficacy and quality

- Scientific evidence from randomized clinical trials is strong for many uses of acupuncture, some herbal medicines and some manual therapies.
- Further research is needed to ascertain efficacy and safety of several other practices and medicinal plants.
- Unregulated or inappropriate use of traditional medicines and practices can have negative or dangerous effects.
- For instance, the herb “Ma Huang” (Ephedra) is traditionally used in China to treat respiratory congestion. In the United States, the herb was marketed as a dietary aid, whose over dosage led to at least a dozen deaths, heart attacks and strokes. (Source – WHO)

Key issues: Safety - efficacy and quality

• The evidence base for TM is expanding
• Now able to search Pub Med with a focus on TM:
  – A search on “safety” retrieves 7,034 articles
  – A search on “efficacy” retrieves 19,884 articles
  – A search on “quality” retrieves 15,572 articles
  (Numbers as of December 2007)
• However, there is still an urgent need to expand this pool of global knowledge
• Research methodologies also need to adapt to the unique attributes of traditional medicine

NCCAM and the National Library of Medicine (NLM) have partnered to create CAM on PubMed, a subset of NLM's PubMed. This is available at [http://nccam.nih.gov/camonpubmed](http://nccam.nih.gov/camonpubmed)

The Cochrane Complementary Medicine Field was established in 1996 to produce, maintain and disseminate systematic reviews on TM/CAM topics.
Key issues: Safety - efficacy and quality

- The WHO has identified global & national key needs in ensuring the safety, efficacy and quality of TM/CAM
- At the global level, there are 3 key needs:
  1. Access to existing knowledge of TM/CAM through exchange of accurate information and networking
  2. Shared results of research into use of TM/CAM for treating common diseases and health conditions
  3. Evidence-base on safety, efficacy and quality of TM/CAM products and therapies

Key issues: Safety - efficacy and quality

• At the national level there are 5 key needs:
  1. Regulation & registration of herbal medicines
  2. Safety monitoring for herbal medicines & other TM/CAM
  3. Support for clinical research into use of TM/CAM for treating country’s common health problems
  4. National standard, technical guidelines and methodology, for evaluating safety, efficacy and quality
  5. National pharmacopoeia and monographs of medicinal plants

Rationale use of TM

The WHO advocates the rationale use of TM. Five key needs at the national level are highlighted:

1. Training guidelines for most commonly used TM/CAM therapies
2. Strengthened & increased organization of TM/CAM providers
3. Strengthened cooperation between TM/CAM medicine & allopathic medicine practitioners
4. Reliable information for consumers on proper use of TM/CAM therapies and products
5. Improved communication between allopathic medicine practitioners & their patients concerning use of TM/CAM

Rationale use of TM

Important progress in addressing needs identified on slide 28 include:

• TM training is highly developed in developing countries e.g. African countries, China and India
• Attempts are being made to define the training needs for health practitioners in developed countries
• TM/CAM providers are becoming increasingly organized throughout the world – the internet is revolutionizing organizational capacity across borders
• Cooperation between TM and allopathic practitioners is slowly increasing
• Information on TM is increasingly available
Rationale use of TM

WHO Monographs on selected medicinal plants is an example of how scientific information is percolating the practice of TM.

The Monographs include:

– Botanical features of the medicinal plants
– The plants major chemical constituents
– Instructions on quality control of plant derived herbs
– Pharmacology
– Posology
– Contraindications
– Adverse reactions


The monographs are a “key reference for national health authorities, scientists and pharmaceutical companies and are also used by lay persons to guide them in rational use of herbal medicines.”

Posology = study of the dosages of medicines and drugs.
Policy & regulatory frameworks

The WHO articulates 5 challenges in this area:

1. Lack of official recognition of TM/CAM and TM/CAM providers
2. TM/CAM not integrated into national health care systems
3. Lack of regulatory and legal mechanisms
4. Equitable distribution of benefits of indigenous TM knowledge and products
5. Inadequate allocation of resources for TM/CAM development and capacity building

Publication number WHO/EDM/TRM/2002.1. Available at:
WHO defines nine key elements of a national TM/CAM policy:
1. Definition of TM/CAM
2. Definition of government’s role in developing TM/CAM
3. Provision for safety and quality assurance of TM/CAM therapies and products
4. Provision for creation or expansion of legislation relating to TM/CAM providers & regulation of herbal medicines
5. Provision of education & training of TM/CAM providers

(Continued)

Policy & regulatory frameworks

WHO key elements of a national TM/CAM policy (cont.):

6. Provision for promotion of proper use of TM/CAM
7. Provision for capacity building of TM/CAM human resources, including allocation of financial resources
8. Provision for coverage by state health insurance
9. Consideration of intellectual property issues

• National policy on TM is part of the 1949 constitution
• Existence of State Administration of Traditional and Complementary Medicine (TCM)
• Herbal industry regulated, pharmacopeia includes herbs & essential drugs list includes herbal medicines
• High level of human TM resources
• Public hospitals include TM practice
• Health insurance covers TM
• High level of research capacity

• Integrated TM/Allopathic education at universities

Numerical data on TM capacity in China: 600 manufacturers of herbal medicines; 340,000 herbal farmers: Human TM resources (525,000 TCM doctors, 10,000 TCM/AM doctors, 83,000 TCM pharmacists, 72,000 TCM associate doctors) Hospital resources (2,500 TCM hospitals, 39 TCM/AM hospitals, 35,000 total beds, 127 TM hospitals for minority groups). 170 national and state TM research institutions. Educational resources (30 TCM universities, 3 TM colleges for minority groups, 51 medical technology schools of TCM).

Case study on the use of TM
Traditional medicine and mental illness in Bangladesh

• The prevalence of a severe mental illness such as schizophrenia is 1% across the globe – this translates to 1.5 million Bangladeshis with schizophrenia
• Traditional medicine is often the only treatment available for severe mental illness in rural Bangladesh
• An array of traditional practitioners offer services in rural Bangladesh
• Pabna Hospital is the only hospital dedicated to the care of those with severe mental illness

The case studies are real, from personal experience in Pabna Mental Hospital, Bangladesh. The names of the cases are fictitious.
Case study on the use of TM
Traditional medicine and mental illness in Bangladesh

- Mehrun Nessa is a 24 year old lady who attends the outpatient center at Pabna Hospital in chains
- She has been “disturbed” and “possessed” for many years according to the relatives that accompany her
- She has been seen by numerous traditional practitioners and has received various forms of treatment, often at great financial cost to the family
- Taking a full history reveals the latest treatment she received was the pouring of hot oil into her ears – Mehrun Nessa is now deaf as well as continuing to be affected by auditory hallucinations
Case study on the use of TM
Traditional medicine and mental illness in Bangladesh

- Sajeeda Khatum is a 18 year old girl who has recently been withdrawn from her family and friends, and has been acting in a bizarre fashion
- Her father took her to a traditional practitioner who immediately recognized she was affected by severe mental illness
- The traditional practitioner and her father are with Sajeeda at the outpatient centre at Pabna
- Following an assessment by the physician, a treatment plan is discussed with Sajeeda’s family and traditional practitioner
- The traditional practitioner has previously supported the care of patients affected by schizophrenia in the community, and is confident he will be able to support Sajeeda and her family
Case study on the use of TM
Traditional medicine and mental illness in Bangladesh

- The two case studies demonstrate marked variation in the practice of traditional medicine in rural Bangladesh
- Traditional practitioners can provide an invaluable resource for the recognition of severe mental illness
- Traditional practitioners can potentially be part of integrated care pathways with allopathic practitioners, as illustrated by the case of Sajeeda Khatum
- Dangerous traditional practices are prevalent in rural Bangladesh – these practices need to be challenged using community based approaches

To learn more about traditional medicine in Bangladesh see the entry in Banglapedia at http://banglapedia.search.com.bd/HT/T_0207.htm
Case study on the use of TM
Traditional medicine and mental illness in Bangladesh

• Research is required to understand the practice of TM in rural Bangladesh
• Such research is being conducted in Bangladesh by Future Health Systems: Innovations for Equity
• This research consortium is conducting health systems research in 6 countries
• The research in Bangladesh aims to understand how informal rural health care systems work and interact with the formal health care systems & local governance
• Gaining such an understanding is the first step towards strategizing interventions that ensure safe and high quality integration of traditional & allopathic medicine
Quiz

• Now we invite you to take the module quiz and test your recent learning.
• This module quiz includes ten questions to test whether you have internalized the key concepts presented in the module. The last question focuses on the case study
• Note your letter answers (A,B,etc.) on a piece of paper. After completing the quiz you can check the following slides for the correct answers and additional feedback.
• After the quiz a short summary is provided for this module presentation
1. Which component is not included in The World Health Organization definition of traditional medicine?

A  Plant, animal and mineral based medicines.
B  Spiritual therapies
C  Allopathic medicines
D  Manual therapies
E  Exercises

2. Which of the following countries uses the term complementary and alternative medicine when referring to traditional medicine?

A  Tanzania
B  Bangladesh
C  United Kingdom
D  Botswana
E  Bhutan
3. Which of the following statements is not true on the level of usage of traditional medicine in the developing world?

A In Africa up to 80% use TM
B In China, 40% of delivered health care is TM
C In India, 65% of the population in rural areas use traditional medicine to help meet their primary health care needs.
D Traditional medicine is used by only a minority in Bangladesh.
E In Chile 71% of the population report having used traditional medicine.

4. Which of the following statements is not true on the level of usage of traditional medicine/CAM in the developed world?

A In the USA, about half of the population have used CAM at least once.
B In France, about half of the population have used CAM at least once.
C In Canada, 70% of the population have used CAM at least once.
D In the UK the formal health care system does not encourage use of CAM.
E In Belgium, about a third of the population have used CAM at least once.
5. Which of the following systems of traditional medicine are not mentioned in the WHO classification system?

A  Chinese Medicine  
B  Ayurveda  
C  Unani  
D  Homeopathy  
E  African indigenous medicine

6. The National Center for Complementary and Alternative Medicine (NCCAM) at the National Institutes of Health groups CAM practices into four domains. Which of the following is not one of the NIH domains?

A  Mind-Body Medicine  
B  Biologically Based Practices  
C  Homeopathy  
D  Manipulative and Body-Based Practices  
E  Energy Medicine
7. The WHO has identified five key needs at national level to ensure the safety, efficacy and quality of TM/CAM. Which of the following is not one of the five key needs that have been identified?

A  Regulation & registration of herbal medicines.
B  Safety monitoring for herbal medicines & other TM/CAM.
C  Increased funding for ensuring safety, efficacy and quality of TM/CAM.
D  Support for clinical research into use of TM/CAM for treating country’s common health problems.
E  National standard, technical guidelines and methodology, for evaluating safety, efficacy and quality.
8. The WHO has articulated five key needs at the national level for the rationale use of TM. Which of the following is not one of the five key needs that have been identified?

A. A national salary and remuneration scale for those practising TM/CAM
B. Strengthened & increased organization of TM/CAM providers
C. Strengthened cooperation between TM/CAM medicine & allopathic medicine practitioners
D. Reliable information for consumers on proper use of TM/CAM therapies and products
E. Improved communication between allopathic medicine practitioners & their patients concerning use of TM/CAM.
9. The WHO defines key elements of a national TM/CAM policy. Which of the following is not one of the key elements?

A  Definition of TM/CAM.
B  Definition of government’s role in developing TM/CAM.
C  Provision for creation or expansion of legislation relating to TM/CAM providers & regulation of herbal medicines.
D  Defining a desired population to practitioner ratio for each of the types of TM practised in the country
E  Provision of education & training of TM/CAM providers
10. Reflect on the case study from Bangladesh. Which of the following statements, in your opinion, is true?

A  The practice of pouring of hot oil in Mehrun Nessa’s ears should not be challenged as it is part of a traditional practice
B  Traditional practitioners can never be integrated into the care of patients with severe mental illness.
C  Traditional medicine needs to be understood prior to strategizing interventions to integrate TM and allopathic medicine
D  The opinion of the community should be ignored as global medical knowledge increases
And now, check out the correct answers
1. Which component is not included in The World Health Organization definition of traditional medicine?

A  Plant, animal and mineral based medicines. Incorrect -- Traditional medicine refers to health practices, approaches, knowledge and beliefs incorporating plant, animal and mineral based medicines, spiritual therapies, manual techniques and exercises, applied singularly or in combination to treat, diagnose and prevent illnesses or maintain well-being.

B  Spiritual therapies Incorrect -- Traditional medicine refers to health practices, approaches, knowledge and beliefs incorporating plant, animal and mineral based medicines, spiritual therapies, manual techniques and exercises, applied singularly or in combination to treat, diagnose and prevent illnesses or maintain well-being.

C  Allopathic medicines -- Correct -- This is not included in the WHO definition if traditional medicine as this is the type of medicine prescribed by allopathic physicians. The WHO definition of traditional medicine refers to health practices, approaches, knowledge and beliefs incorporating plant, animal and mineral based medicines, spiritual therapies, manual techniques and exercises, applied singularly or in combination to treat, diagnose and prevent illnesses or maintain well-being.

D  Manual therapies Incorrect -- Traditional medicine refers to health practices, approaches, knowledge and beliefs incorporating plant, animal and mineral based medicines, spiritual therapies, manual techniques and exercises, applied singularly or in combination to treat, diagnose and prevent illnesses or maintain well-being.

E  Exercises Incorrect -- Traditional medicine refers to health practices, approaches, knowledge and beliefs incorporating plant, animal and mineral based medicines, spiritual therapies, manual techniques and exercises, applied singularly or in combination to treat, diagnose and prevent illnesses or maintain well-being.
2. Which of the following countries uses the term complementary and alternative medicine when referring to traditional medicine?

A  Tanzania  Incorrect -- The terms "complementary medicine" or "alternative medicine" are used inter-changeably with traditional medicine in some countries. They refer to a broad set of health care practices that are not part of that country's own tradition and are not integrated into the dominant health care system. The term is often used in the United Kingdom and other developed countries.

B  Bangladesh -- Incorrect -- The terms "complementary medicine" or "alternative medicine" are used inter-changeably with traditional medicine in some countries. They refer to a broad set of health care practices that are not part of that country's own tradition and are not integrated into the dominant health care system. The term is often used in the United Kingdom and other developed countries.

C  United Kingdom  Correct -- The terms "complementary medicine" or "alternative medicine" are used inter-changeably with traditional medicine in some countries. They refer to a broad set of health care practices that are not part of that country's own tradition and are not integrated into the dominant health care system. The term is often used in the United Kingdom and other developed countries.

D  Botswana -- Incorrect -- The terms "complementary medicine" or "alternative medicine" are used inter-changeably with traditional medicine in some countries. They refer to a broad set of health care practices that are not part of that country's own tradition and are not integrated into the dominant health care system. The term is often used in the United Kingdom and other developed countries.

E  Bhutan -- Incorrect -- The terms "complementary medicine" or "alternative medicine" are used inter-changeably with traditional medicine in some countries. They refer to a broad set of health care practices that are not part of that country's own tradition and are not integrated into the dominant health care system. The term is often used in the United Kingdom and other developed countries.
3. Which of the following statements is not true on the level of usage of traditional medicine in the developing world?

A  In Africa up to 80% use TM -- Incorrect  -- This statement is true.
B  In China, 40% of delivered health care is TM -- Incorrect  -- This statement is true.
C  In India, 65% of the population in rural areas use traditional medicine to help meet their primary health care needs. -- Incorrect  -- statement is true.
D  Traditional medicine is used by only a minority in Bangladesh. -- Correct  -- This statement is not true. TM is widely used in Bangladesh – exact latest data on the level of use is currently being explored by researchers.
E  In Chile 71% of the population report having used traditional medicine. Incorrect  -- This statement is true.
4. Which of the following statements is not true on the level of usage of traditional medicine/CAM in the developed world?

A  In the USA, about half of the population have used CAM at least once. -- Incorrect. -- This statement is true.

B  In France, about half of the population have used CAM at least once. -- Incorrect. -- This statement is true.

C  In Canada, 70% of the population have used CAM at least once. -- Incorrect. -- This statement is true.

D  In the UK the formal health care system does not encourage the use of CAM. -- Correct -- This statement is not true. In the UK 40% of all General Practitioners offer some form of CAM referral or access.

E  In Belgium, about a third of the population have used CAM at least once. -- Incorrect. -- This statement is true.
5. Which of the following systems of traditional medicine are not mentioned in the WHO classification system?

A  Chinese Medicine  -- Incorrect  -- The WHO Traditional Medicine Strategy 2002-2005, displays a Table on the commonly used TM/CAM therapies and therapeutic techniques. Chinese medicine is included in this table.
B  Ayurveda  Incorrect  -- The WHO Traditional Medicine Strategy 2002-2005, displays a Table on the commonly used TM/CAM therapies and therapeutic techniques. Ayurveda is included in this table.
C  Unani  -- Incorrect  -- The WHO Traditional Medicine Strategy 2002-2005, displays a Table on the commonly used TM/CAM therapies and therapeutic techniques. Unani is included in this table.
D  Homeopathy  -- Incorrect  -- The WHO Traditional Medicine Strategy 2002-2005, displays a Table on the commonly used TM/CAM therapies and therapeutic techniques. Homeopathy is included in this table.
E  African indigenous medicine  -- Correct  -- The WHO Traditional Medicine Strategy 2002-2005, displays a Table on the commonly used TM/CAM therapies and therapeutic techniques. Surprisingly, African indigenous medicine is not included in this table.
6. The National Center for Complementary and Alternative Medicine (NCCAM) at the National Institutes of Health groups CAM practices into four domains. Which of the following is not one of the NIH domains?

A  Mind-Body Medicine -- Incorrect. -- This is one of the four NCCAM domains.
B  Biologically Based Practices -- Incorrect. -- This is one of the four NCCAM domains.
C  Homeopathy -- Correct -- This is not one of the four NCCAM domains.
   Homeopathy is considered a whole medical system, which cuts across all four domains. Whole medical systems are built upon complete systems of theory and practice. Often, these systems have evolved apart from and earlier than the conventional medical approach used in the United States. Examples of whole medical systems that have developed in Western cultures include homeopathic medicine, a whole medical system that originated in Europe. Homeopathy seeks to stimulate the body's ability to heal itself by giving very small doses of highly diluted substances that in larger doses would produce illness or symptoms (an approach called "like cures like").
D  Manipulative and Body-Based Practices -- Incorrect. -- This is one of the four NCCAM domains.
E  Energy Medicine -- Incorrect. -- This is one of the four NCCAM domains.
The WHO has identified five key needs at national level to ensure the safety, efficacy and quality of TM/CAM. Which of the following is **not** one of the five key needs that have been identified?

A. Regulation & registration of herbal medicines. -- Incorrect -- This is one of the five key needs identified by the WHO.

B. Safety monitoring for herbal medicines & other TM/CAM. -- Incorrect -- This is one of the five key needs identified by the WHO.

C. Increased funding for ensuring safety, efficacy and quality of TM/CAM. -- Correct -- Although increased funding is certainly needed, this is not one of the five key needs identified by the WHO.

D. Support for clinical research into use of TM/CAM for treating country’s common health problems. -- Incorrect -- This is one of five key needs identified by the WHO.

E. National standard, technical guidelines and methodology, for evaluating safety, efficacy and quality. -- Incorrect -- This is one of five key needs identified by the WHO.
8. The WHO has articulated five key needs at the national level for the rationale use of TM. Which of the following is not one of the five key needs that have been identified?

A  A national salary and remuneration scale for those practising TM/CAM -- Correct -- This is not one of the five key needs identified by the WHO for the rationale use of TM.

B  Strengthened & increased organization of TM/CAM providers. Incorrect This is one of the five key needs identified by the WHO for the rationale use of TM.

C  Strengthened cooperation between TM/CAM medicine & allopathic medicine practitioners. -- Incorrect -- This is one of the five key needs identified by the WHO for the rationale use of TM.

D  Reliable information for consumers on proper use of TM/CAM therapies and products. -- Incorrect -- This is one of the five key needs identified by the WHO for the rationale use of TM.

E  Improved communication between allopathic medicine practitioners & their patients concerning use of TM/CAM -- Incorrect -- This is one of the five key needs identified by the WHO for the rationale use of TM.
9. The WHO defines key elements of a national TM/CAM policy. Which of the following is not one of the key elements?

A  Definition of TM/CAM. -- Incorrect -- This is one of the key elements of a national TM/CAM policy defined by the WHO.
B  Definition of government’s role in developing TM/CAM. -- Incorrect -- This is one of the key elements of a national TM/CAM policy defined by the WHO.
C  Provision for creation or expansion of legislation relating to TM/CAM providers & regulation of herbal medicines. -- Incorrect -- This is one of the key elements of a national TM/CAM policy defined by the WHO.
D  Defining a desired population to practitioner ratio for each of the types of TM practised in the country. -- Correct -- This is not one of the key elements of a national TM/CAM policy defined by the WHO.
E  Provision of education & training of TM/CAM providers. -- Incorrect -- This is one of the key elements of a national TM/CAM policy defined by the WHO.
10. Reflect on the case study from Bangladesh. Which of the following statements, in your opinion, is true?

A  The practice of pouring of hot oil in Mehrun Nessa’s ears should not be challenged as it is part of a traditional practice. -- Incorrect -- This is a harmful practice that infringes on the human rights of Mehrun Nessa.

B  Traditional practitioners can never be integrated into the care of patients with severe mental illness. -- Incorrect -- The supportive role provided by traditional practitioners can be invaluable in the integrated care in the community for persons affected by severe mental illness.

C  Traditional medicine needs to be understood prior to strategizing interventions to integrate TM and allopathic medicine. -- Correct -- There is an urgent need to gain an understanding of TM in Bangladesh. Research conducted by Future Health Systems: Innovations for Equity is contributing to this increased understanding in rural Bangladesh.

D  The opinion of the community should be ignored as global medical knowledge increases, -- Incorrect -- Community ideas, concerns, and expectations related to health and health care need to be understood when designing health systems for the future.
Summary

• Traditional medicine is an integral part of the health seeking behavior of people throughout the globe
• Gaining an understanding of TM/CAM is essential for designing inclusive health systems
• Material presented in this module will allow participants to appreciate the complexity of this area of work
• Resources provided in this module can guide participants in their additional learning in TM/CAM
   This document aims to provide primary care groups (PCGs) with a reference source on forms of complementary and alternative medicine (CAM). It begins by defining terms and giving an overview of current CAM provision in primary care. The main body of the document deals with six individual therapies, namely acupuncture, aromatherapy, chiropractic, homeopathy, hypnotherapy, and osteopathy. In each case information is provided on conditions which are likely to benefit from treatment, practitioner qualifications, and registering bodies. The document cites numerous references.
   This article provides an excellent historical perspective on the development of different systems of medicine. It covers: Egyptian medicine; Greek medicine; Greco-Arabic medicine; Chinese medicine; Indian medicine; Ayurveda; Unani; and Siddha.

Web Links

   This page provides links to descriptions of activities, reports, news and events, as well as contacts and cooperating partners in the various WHO programmes and offices working on this topic. Also shown are links to related web sites and topics.

   This page provides information on Complementary and Alternative Medicine, including British policy, summary documents on different types of complementary medicine, links with primary care, as well as the regulation of the field.
Credits

This slide show was prepared as part of an educational project of the Global Health Education Consortium and the following collaborating partners:

- Shamsuzzooha B. Syed
- Stephen A. Haering
The Global Health Education Consortium gratefully acknowledges the support provided for developing these teaching modules from:

**Margaret Kendrick Blodgett Foundation**  
**The Josiah Macy, Jr. Foundation**  
**Arnold P. Gold Foundation**

This work is licensed under a [Creative Commons Attribution-Noncommercial-No Derivative Works 3.0 United States License](https://creativecommons.org/licenses/by-nc-nd/3.0/us/).
NOTE: Slide 5
Definitions: What is Traditional Medicine?

The WHO quote on traditional medicines presented on the slide can be accessed at:
http://www.who.int/mediacentre/factsheets/fs134/en/

The WHO Traditional Medicine Strategy Paper states the following in answering the question of “What is traditional medicine?”

“Traditional medicine is a comprehensive term used to refer both to TM systems such as traditional Chinese medicine, Indian ayurveda and Arabic unani medicine, and to various forms of indigenous medicine. TM therapies include medication therapies – if they involve use of herbal medicines, animal parts and/or minerals – and non-medication therapies – if they are carried out primarily without the use of medication, as in the case of acupuncture, manual therapies and spiritual therapies. In countries where the dominant health care system is based on allopathic medicine, or where TM has not been incorporated into the national health care system, TM is often termed ‘complimentary’, ‘alternative’ or ‘non-conventional’ medicine.”

The same paper also states: “There are many TM systems, including traditional Chinese medicine, Indian ayurveda and Arabic unani medicine. A variety of indigenous TM systems have also been developed throughout history by Asian, African, Arabic, Native American, Oceanic, Central and South American and other cultures. Influenced by factors such as history, personal attitudes and philosophy, their practice may vary greatly from country to country and from region to region. Needless to say, their theory and application often differ significantly from those of allopathic medicine.”

Traditional medicine will be referred to as TM within slides in this module.

Return to Slide 5

NOTE: Slide 6
Definitions: 10 Core Terms

Important definitions are presented below - source World Health Organization available at http://www.who.int/medicines/areas/traditional/definitions/en/index.html

Traditional medicine refers to health practices, approaches, knowledge and beliefs incorporating plant, animal and mineral based medicines, spiritual therapies, manual techniques and exercises, applied singularly or in combination to treat, diagnose and prevent illnesses or maintain well-being.

Traditional medicine is the sum total of the knowledge, skills, and practices based on the theories, beliefs, and experiences indigenous to different cultures, whether explicable or not, used in the maintenance of health as well as in the prevention, diagnosis, improvement or treatment of physical and mental illness. The terms "complementary medicine" or "alternative medicine" are used interchangeably with traditional medicine in some countries. They refer to a broad set of health care practices that are not part of that country's own tradition and are not integrated into the dominant health care system.
The Cochrane Collaboration defines complementary and alternative medicine (CAM) as a broad domain of healing resources that encompasses all health systems, modalities, and practices and their accompanying theories and beliefs, other than those intrinsic to the politically dominant health systems of a particular society or culture in a given historical period.

The National Institute of Health in the US states that CAM is a group of diverse medical and health care systems, practices, and products that are not presently considered to be part of conventional medicine. Conventional medicine is medicine as practiced by holders of M.D. (medical doctor) or D.O. (doctor of osteopathy) degrees and by their allied health professionals, such as physical therapists, psychologists, and registered nurses. Some health care providers practice both CAM and conventional medicine. The list of what is considered to be CAM changes continually, as those therapies that are proven to be safe and effective become adopted into conventional health care and as new approaches to health care emerge.

Herbal medicines include herbs, herbal materials, herbal preparations and finished herbal products that contain as active ingredients parts of plants, or other plant materials, or combinations.

Herbs: crude plant material such as leaves, flowers, fruit, seed, stems, wood, bark, roots, rhizomes or other plant parts, which may be entire, fragmented or powdered.

Herbal materials: in addition to herbs, fresh juices, gums, fixed oils, essential oils, resins and dry powders of herbs. In some countries, these materials may be processed by various local procedures, such as steaming, roasting, or stir-baking with honey, alcoholic beverages or other materials.

Herbal preparations: the basis for finished herbal products and may include comminuted or powdered herbal materials, or extracts, tinctures and fatty oils of herbal materials. They are produced by extraction, fractionation, purification, concentration, or other physical or biological processes. They also include preparations made by steeping or heating herbal materials in alcoholic beverages and/or honey, or in other materials.

Finished herbal products: herbal preparations made from one or more herbs. If more than one herb is used, the term mixture herbal product can also be used. Finished herbal products and mixture herbal products may contain excipients in addition to the active ingredients. However, finished products or mixture products to which chemically defined active substances have been added, including synthetic compounds and/or isolated constituents from herbal materials, are not considered to be herbal.

Traditional use of herbal medicines refers to the long historical use of these medicines. Their use is well established and widely acknowledged to be safe and effective, and may be accepted by national authorities.

Therapeutic activity refers to the successful prevention, diagnosis and treatment of physical and mental illnesses; improvement of symptoms of illnesses; as well as beneficial alteration or regulation of the physical and mental status of the body.

Active ingredients refer to ingredients of herbal medicines with therapeutic activity. In herbal medicines where the active ingredients have been identified, the preparation of these medicines should be standardized to contain a defined amount of the active ingredients, if adequate analytical methods are
available. In cases where it is not possible to identify the active ingredients, the whole herbal medicine may be considered as one active ingredient.

NOTE: Slide 9
Level of Global TM Usage


The most comprehensive and reliable findings to date on Americans' use of CAM were released in May 2004 by the National Center for Complementary and Alternative Medicine (NCCAM) and the National Center for Health Statistics (NCHS, part of the Centers for Disease Control and Prevention). A survey was completed by 31,044 adults aged 18 years or older from the U.S. civilian noninstitutionalized population. The survey included questions on various types of CAM therapies commonly used in the United States. Details can be found at: http://nccam.nih.gov/news/camsurvey_fs1.htm

The study found that in the United States, 36% of adults used some form of CAM. When megavitamin therapy and prayer specifically for health reasons are included in the definition of CAM, that number rises to 62%. Perhaps most importantly the survey found that most people use CAM along with conventional medicine rather than in place of conventional medicine.

CAM Therapies Included in the survey: Acupuncture*; Ayurveda*; Biofeedback*; Chelation therapy*; Chiropractic care*; Deep breathing exercises; Diet-based therapies (Vegetarian diet, Macrobiotic diet, Atkins diet, Pritikin diet, Ornish diet, Zone diet); Energy healing therapy*; Folk medicine*; Guided imagery; Homeopathic treatment; Hypnosis*; Massage*; Meditation; Megavitamin therapy; Natural products (nonvitamin and nonmineral, such as herbs and other products from plants, enzymes, etc.); Naturopathy*; Prayer for health reasons (Prayed for own health, Others ever prayed for your health, Participate in prayer group, Healing ritual for self); Progressive relaxation; Qi gong; Reiki*; Tai chi; Yoga. An asterisk (*) indicates a practitioner-based therapy.

NOTE: Slide 14
Classifications of TM/CAM Chinese Medicine

The World Foundation for Traditional Chinese Medicine is an excellent resource to gain an understanding of TCM. The website for the Foundation is: http://www.tcmworld.org/ The Foundation website explains: “At the heart of TCM is the tenet that the root cause of illnesses, not their symptoms, must be treated. In modern-day terms, TCM is holistic in its approach; it views every aspect of a person—body, mind, spirit, and emotions—as part of one complete circle rather than loosely connected pieces to be treated individually.” Further, the website provides an introduction to some of the key terms and concepts in traditional Chinese medicine.
A section of the website explains the major TCM treatment modalities http://www.tcmworld.org/what_is_tcm/:

“Often Western CAM practitioners and their patients or clients derive their understanding of TCM from acupuncture. However, acupuncture is only one of the major treatment modalities of this comprehensive medical system based on the understanding of Qi or vital energy. These major treatment modalities are:

Qigong: an energy practice, generally encompassing simple movements and postures. Some Qigong systems also emphasize breathing techniques.

Herbal Therapy: the use of herbal combinations or formulas to strengthen and support organ system function.

Acupuncture: the insertion of needles in acupoints to help Qi flow smoothly.

Acupressure: the use of specific hand techniques to help Qi flow smoothly.

Foods for Healing: the prescription of certain foods for healing based on their energy essences or energy signatures, not nutritional value.

Chinese Psychology: the understanding of emotions and their relationship to the internal organ systems and their influence on health.”


The abstract is reproduced below:

“Traditional Chinese medicine (TCM) is a complete system of healing that developed in China about 3000 years ago, and includes herbal medicine, acupuncture, moxibustion and massage, etc. In recent decades the use of TCM has become more popular in China and throughout the world. Traditional Japanese medicine has been used for 1500 years and includes Kampo-yaku (herbal medicine), acupuncture and acupressure. Kampo is now widely practiced in Japan and is fully integrated into the modern health-care system. Kampo is based on TCM but has been adapted to Japanese culture. In this paper we review the history and characteristics of TCM and traditional Japanese medicine, i.e. the selection of traditional Chinese herbal medicine treatments based on differential diagnosis, and treatment formulations specific for the 'Sho' (the patient's symptoms at a given moment) of Japanese Kampo—and look at the prospects for these forms of medicine.”

Return to Slide 14

==================================================

NOTE: Slide 15
Classification of TM/CAM Ayurveda

The Department of Ayurveda, Yoga & Naturopathy, Unani, Siddha and Homeopathy (AYUSH) of the
Ministry of Health and Family Welfare of India has an excellent website covering Indian medicine: http://indianmedicine.nic.in/index.asp

The section on Ayurveda can be found at: http://indianmedicine.nic.in/ayurveda.asp

An explanation of the body matrix in Ayurveda is explained in the slide – this is at the core of Ayurveda. Further details on multiple dimensions of Ayurveda are provided at the website. These include: (1) “Panchamahabhutas” (2) Health and sickness concepts in Ayurveda, (3) Diagnosis in Ayurveda (4) Treatment types in Ayurveda (5) Preventive Treatment & the concepts of Aetio-Pathogenesis (6) Diet and Ayurvedic treatment.

Another paper resource is a review article titled, “Utilization of ayurveda in health care: an approach for prevention, health promotion, and treatment of disease. Part 1-ayurveda, the science of life.” The authors are Sharma H, Chandola HM, Singh G, Basisht G. The Ohio State University Center for Integrative Medicine, College of Medicine, The Ohio State University, Columbus, Ohio, United States. J Altern Complement Med. 2007 Nov;13(9):1011-20.

The abstract is reproduced below:

“Ayurveda is a natural health care system that originated in India more than 5000 years ago. Its main objective is to achieve optimal health and well-being through a comprehensive approach that addresses mind, body, behavior, and environment. Ayurveda emphasizes prevention and health promotion, and provides treatment for disease. It considers the development of consciousness to be essential for optimal health and meditation as the main technique for achieving this. Treatment of disease is highly individualized and depends on the psychophysiologic constitution of the patient. There are different dietary and lifestyle recommendations for each season of the year. Common spices are utilized in treatment, as well as herbs and herbal mixtures, and special preparations known as Rasayanas are used for rejuvenation, promotion of longevity, and slowing of the aging process. A group of purification procedures known as Panchakarma removes toxins from the physiology. Whereas Western allopathic medicine is excellent in handling acute medical crises, Ayurveda demonstrates an ability to manage chronic disorders that Western medicine has been unable to. It may be projected from Ayurveda's comprehensive approach, emphasis on prevention, and ability to manage chronic disorders that its widespread use would improve the health status of the world's population.”

Return to Slide 15

=================================

NOTE: Slide 19

Classifications of TM/CAM Homeopathy

The National Center for Complementary and Alternative Medicine at the National Institutes of Health provides a large amount of information on homeopathy at: http://nccam.nih.gov/health/homeopathy Subjects covered include: (1) What is homeopathy?; (2) What is the history of the discovery and use of homeopathy? (3) What kind of training do homeopathic practitioners receive? (4) What do homeopathic practitioners do in treating patients? (5) What are homeopathic remedies? (6) How does the U.S. Food and Drug Administration (FDA) regulate homeopathic remedies? (7) Have any side effects or complications been reported from the use of homeopathy? (8) What has scientific research found out about whether homeopathy works? (9) Are there scientific controversies associated with homeopathy?
(10) Is NCCAM funding research on homeopathy? Also, further information sources and references are provided.

Another paper resource is an article titled, “Where does homeopathy fit in pharmacy practice?. The authors are Johnson T, Boon H from the University of Toronto, Leslie Dan Faculty of Pharmacy, ON, Canada. Am J Pharm Educ. 2007 Feb 15;71(1):7. Full text available at: http://www.pubmedcentral.nih.gov/articlerender.fcgi?tool=pubmed&pubmedid=17429507

The abstract is reproduced below:
“Homeopathy has been the cause of much debate in the scientific literature with respect to the plausibility and efficacy of homeopathic preparations and practice. Nonetheless, many consumers, pharmacists, physicians, and other health care providers continue to use or practice homeopathic medicine and advocate its safety and efficacy. As drug experts, pharmacists are expected to be able to counsel their patients on how to safely and effectively use medications, which technically includes homeopathic products. Yet many pharmacists feel that the homeopathic system of medicine is based on unscientific theories that lack supporting evidence. Since consumers continue to use homeopathic products, it is necessary for pharmacists to have a basic knowledge of homeopathy and to be able to counsel patients about its general use, the current state of the evidence and its use in conjunction with other medications.

Return to Slide 19

=================================

NOTE: Slide 22

Classification of TM/ CAM

An Alternative NIH Classification

The National Center for Complementary and Alternative Medicine at the National Institutes of Health groups CAM practices into four domains, recognizing there can be some overlap. The extracts below are available at: http://nccam.nih.gov/health/whatiscam

1. Mind-Body Medicine – Mind-body medicine uses a variety of techniques designed to enhance the mind’s capacity to affect bodily function and symptoms. Some techniques that were considered CAM in the past have become mainstream (for example, patient support groups and cognitive-behavioral therapy). Other mind-body techniques are still considered CAM, including meditation, prayer, mental healing, and therapies that use creative outlets such as art, music, or dance.

2. Biologically Based Practices – Biologically based practices in CAM use substances found in nature, such as herbs, foods, and vitamins. Some examples include dietary supplements, herbal products, and the use of other so-called natural but as yet scientifically unproven therapies (for example, using shark cartilage to treat cancer).

3. Manipulative and Body-Based Practices – Manipulative and body-based practices in CAM are based on manipulation (the application of controlled force to a joint, moving it beyond the normal range of motion in an effort to aid in restoring health). Manipulation may be performed as a part of other therapies or whole medical systems, including chiropractic medicine, massage, and naturopathy. and/or
movement of one or more parts of the body.

4. Energy Medicine – Energy therapies involve the use of energy fields. They are of two types:
   a) Biofield therapies are intended to affect energy fields that purportedly surround and penetrate the human body. The existence of such fields has not yet been scientifically proven. Some forms of energy therapy manipulate biofields by applying pressure and/or manipulating the body by placing the hands in, or through, these fields.

   b) Bioelectromagnetic-based therapies involve the unconventional use of electromagnetic fields, such as pulsed fields, magnetic fields, or alternating-current or direct-current fields.

In addition, NCCAM studies CAM whole medical systems, which cut across all domains. Whole medical systems are built upon complete systems of theory and practice. Often, these systems have evolved apart from and earlier than the conventional medical approach used in the United States. Examples of whole medical systems that have developed in Western cultures include homeopathic medicine, a whole medical system that originated in Europe. Homeopathy seeks to stimulate the body's ability to heal itself by giving very small doses of highly diluted substances that in larger doses would produce illness or symptoms (an approach called "like cures like"). Naturopathic medicine, a whole medical system that also originated in Europe, aims to support the body's ability to heal itself through the use of dietary and lifestyle changes together with CAM therapies such as herbs, massage, and joint manipulation. Examples of systems that have developed in non-Western cultures include Traditional Chinese Medicine, a whole medical system that originated in China. It is based on the concept that disease results from disruption in the flow of qi and imbalance in the forces of yin and yang. Practices such as herbs, meditation, massage, and acupuncture seek to aid healing by restoring the yin-yang balance and the flow of qi. Another example of a system that developed in non-Western cultures is Ayurveda, a whole medical system that originated in India. It aims to integrate the body, mind, and spirit to prevent and treat disease. Therapies used include herbs, massage, and yoga.

NOTE: Slide 29

Rationale Use of TM

Paper resource: What should students learn about complementary and alternative medicine? Gaster B, Unterborn JN, Scott RB, Schneeweiss R. University of Washington School of Medicine, Seattle, Washington 98105, USA. Acad Med. 2007 Oct;82(10):934-8. barakg@u.washington.edu

Abstract: With thousands of complementary and alternative medicine (CAM) treatments currently being used in the United States today, it is challenging to design a concise body of CAM content which will fit into already overly full curricula for health care students. The purpose of this article is to outline key principles which 15 National Center for Complementary and Alternative Medicine-funded education programs found useful when developing CAM course-work and selecting CAM content. Three key guiding principles are discussed: teach foundational CAM competencies to give students a framework for learning about CAM; choose specific content on the basis of evidence, demographics and condition (what conditions are most appropriate for CAM therapies?); and finally, provide students with skills for
future learning, including where to find reliable information about CAM and how to search the scientific literature and assess the results of CAM research. Most of the programs developed evidence-based guides to help students find reliable CAM resources. The cumulative experiences of the 15 programs have been compiled, and an annotated table outlining the most highly recommended resources about CAM is presented.

Associations of traditional practitioners exist in the majority of African countries and many African countries have established TM research institutions.

An example of an organization of TM/CAM providers: The European Herbal & Traditional Medicine Practitioners Association (EHPA). Website: http://www.ehpa.eu/

“The EHTPA was founded in 1993 when it became clear that with the development of the European Union, the legislative framework under which herbal medicine was practised was likely to undergo radical change. The main professional herbal practitioner associations in the UK formed a UK national organisation called the British Herbal Practitioners Association (BHPA). In Europe, the BHPA affiliated with Irish and Danish herbal associations to form the European Herbal & Traditional Medicine Practitioners Association (EHTPA).

In late 1994, the basis of herbal practice in the UK was threatened by the sudden announcement by the Medicines Control Agency (now the Medicines and Healthcare products Regulatory Agency) that existing European medicines legislation had swept away all those statutes in the Medicines Act 1968 that gave British herbal practitioners their legal right to obtain herbal medicines. The EHTPA found itself thrown headlong into the campaign to rescue the right of UK practitioners to obtain herbal medicines without the need for full medicines licences. This highly successful campaign did much to create firm bonds between its member organisations.

Today our work focuses on the development of standards of training and education, accreditation of training institutions, strengthening the identity of the profession and working closely with key stakeholders on specific projects. For example, we are a key stakeholder, working closely with the Department of Health, in developing the path towards statutory regulation of herbal practitioners in the UK. We work with the MHRA on reviewing the standards of safety and quality of unlicensed herbal remedies and with the rest of the herbal sector on implementing the Directive of Traditional Herbal Medicinal Products."

NOTE: Slide 39
Case Study on the use of TM, Traditional Medicine and Mental Illness in Bangladesh

Details on the activities of Future Health Systems: Innovations for Equity can be found at http://www.futurehealthsystems.org/index.htm

The paper emphasizes the importance of considering the interface between evidence generation and decision making. A section of the paper on the work in Bangladesh is reproduced below:

“A significant proportion of the poor in Bangladesh use informal health care providers as their first line of care. The general objective of the work is to understand this informal care system and its interaction with the formal health system and local governance in Chakaria, a rural area of Bangladesh. The project aims to answer research questions focused on the: role of informal health care system in the health status of the poor in rural Bangladesh; the relationship between informal and formal health sectors; health care utilization patterns and their determinants; utilization costs of formal and informal health care services; service quality provided by informal health care providers; and the role of elected local government representatives in health issues, particularly in relation to the poor. Study findings will then be used to develop, implement, and evaluate appropriate interventions to improve the health of the poor between 2007 and 2010.

The proposed work incorporates evidence-policy interface considerations in a number of ways. As stated above, the poor in Bangladesh depend on the informal sector; the chosen subject area as well as the research approach is firmly embedded within a development context. The inter-relationship of the informal health sector with individual and community vulnerabilities and capabilities can be elucidated from the proposed research. The effects of health shocks on care-seeking from either the formal or informal health sector can also be explicated by the proposed work. The proposed research is operational in nature and is action focused. Findings will help design future interventions for working with the informal health sector in Bangladesh – thus the process of influencing policy making with research findings can be explored prospectively. Costs and quality of care are integral to the research proposal, which creates a further ‘real world’ focus of the research. Consideration of how the informal health sector can be incorporated into the health system represents an innovative approach to future health system development.

Project findings on key informal health providers may significantly affect policy making. This decision making process, embedded in a political context, can be examined. For example, a cohort of village “doctors” (non-MDs) was a result of government sponsored training schemes in the past. Study findings on their current role may influence decision-making in relation to these informal health providers. Findings from all local elected representatives (162 elected members of 18 union councils) will provide valuable information on local decision maker perspectives on the health sector. While multiple levels of policy making are recognized in the literature, the more local levels are often ignored – this work attempts to fill this key knowledge gap. In addition, a wide array of local stakeholders is included within the research proposal. Many of these stakeholders, for example traditional healers, are non-intuitive stakeholders in formal health system development.”