

TRADITIONAL MEDICINES

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12TH MAY 2015



OUTLINE

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DEFINITIONS

- **Traditional medicine** (also known as **alternative, complimentary, indigenous or folk medicine**) comprises knowledge systems that developed over generations within various societies before the era of modern medicine.
- **The World Health Organization (WHO)** defines traditional medicine as "the sum total of the knowledge, skills, and practices based on the theories, beliefs, and experiences indigenous to different cultures, whether explicable or not, used in the maintenance of health as well as in the prevention, diagnosis, improvement or treatment of physical and mental illness.

BRIEF HISTORY OF TRADITIONAL MEDICINES

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Emperor Sheng Nun (2730 BC – 3000 BC) compiled the first pharmacopoeia .

The Egyptian Papyrus Elber dated to have been written at about 1500 BC mentioned some very prominent medicinal plants still used today.

**Traditional
medicine
practitioners
worthy of
mention**

Hippocrates (460 BC); the father of modern medicine wrote a book known as *Materia Medica* composed of over 400 simple remedies .

Theophrastus of Athens (370 BC); a biologist and botanist known to have written the book *Historia Plantarum*.

TRADITIONAL MEDICINE PRACTICES (TMP)

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TMP cont'd

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- **Traditional African Medicine (TAM):** A holistic discipline involving Indigenous Herbalism and African spirituality delivered by diviners, midwives and herbalists. Diagnosis is reached through spiritual means and a treatment (usually consisting of a herbal remedy with symbolic and spiritual significance) is prescribed.



TMP cont'd

- **Acupuncture:** A treatment derived from ancient Chinese medicine in which fine needles are inserted at certain sites in the body for therapeutic or preventative purposes.



TMP cont'd

- **Ayurveda:** One of the world's oldest holistic healing systems developed over 5,000 years ago in India. It is based on the belief that health and wellness depend on a delicate balance between mind, body and spirit. It is believed that the body constitution (*prakriti*) is made up of a combination of five universal elements; space, air, fire, water and earth.



TMP cont'd

- **Traditional Chinese Medicine (TCM):** A system of primary health care that includes Acupuncture, Chinese herbal medicine, Remedial massage (*anmo tuina*), Exercise & breathing therapy (e.g *qigong*), Diet and Lifestyle advice. It originated from China dating back thousands of years. The primary feature of modern TCM is the premise that good health relies on the restoration and maintenance of harmony, balance and order to the individual.
- **Core disciplines** which study traditional medicine include; Herbalism, Ethnomedicine, Ethnobotany, and Medical anthropology

TRADITIONAL HEALERS (TH)

The following are the categories of TH;

- Herbalists
- Traditional birth attendants
- Bone-setters
- Traditional medicinal ingredient dealers
- Traditional psychiatrists
- Practitioners of therapeutic occultism

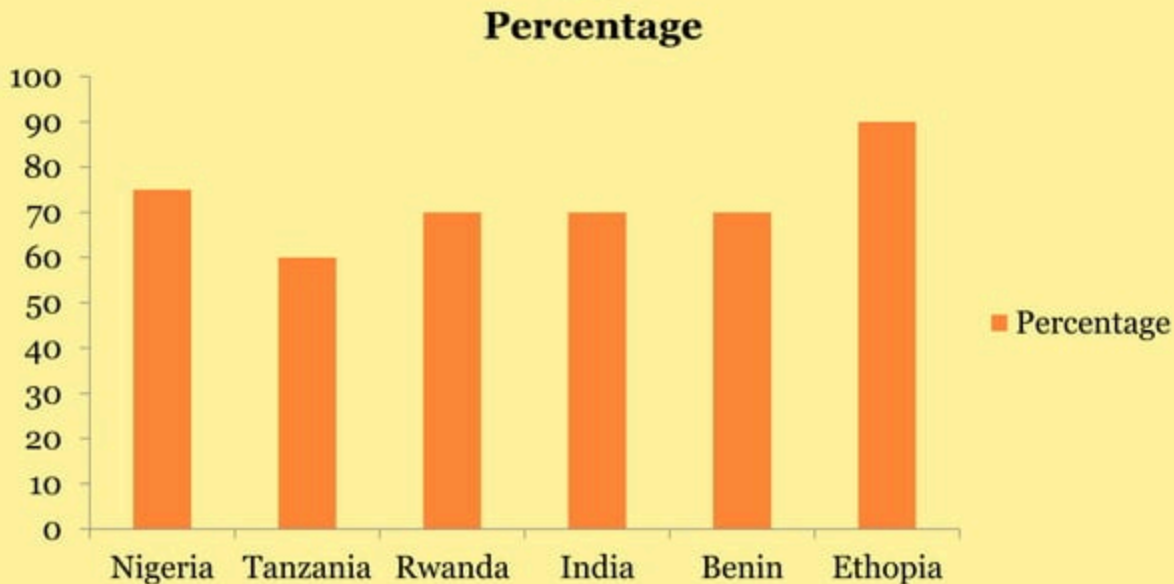
WHY TRADITIONAL MEDICINES?

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- Traditional and modern medicine have much to offer each other despite their differences. The time is right for the revival of traditional medicine use.
- For several millennia, THs around the world have healed the wounded, ill and sick with herbal and/or animal-derived remedies, handed down across generations.
- In Africa and Asia, about 80% of the population still use traditional remedies rather than modern medicine for primary health care.
- Only about 4% of existing plants have been researched on.

WHY TM cont'd

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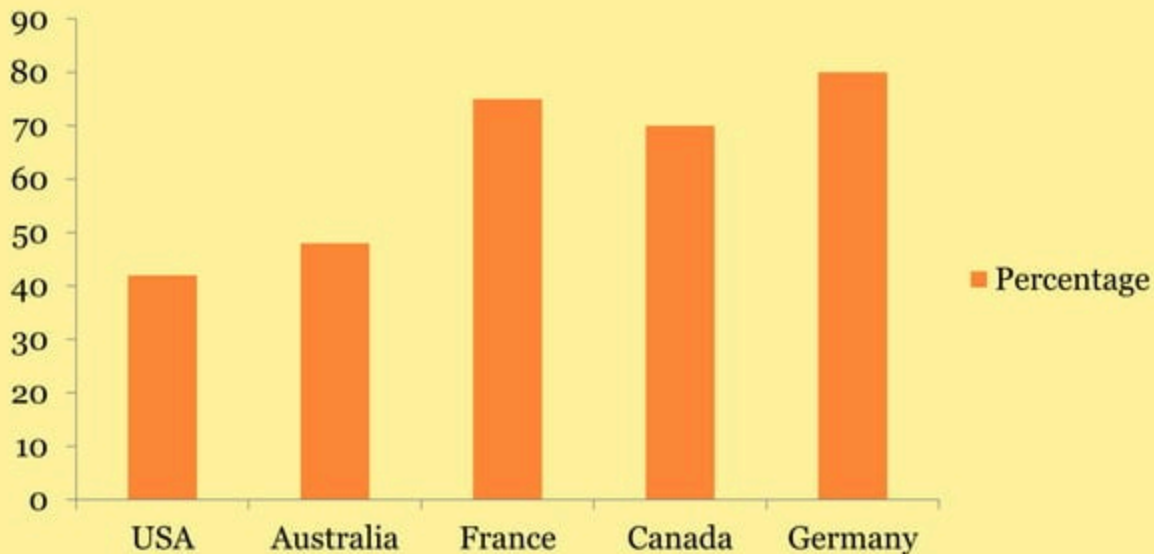


Populations in developing countries using traditional medicines for primary health care (courtesy WHO, 2010)

WHY TM cont'd

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Percentage



Populations in developed countries who have used TM/CAM at least once (courtesy WHO, 2010)

WHY TM cont'd

- In developed nations, TM is rapidly gaining appeal. Estimates suggest up to 80% of the world population have tried a traditional therapy such as *Acupuncture* or *Homeopathy*.
- A survey conducted earlier this year found that 74% of US medical students believe that western medicine would benefit by integrating traditional/alternative therapies and practices.
- The industry is also worth lots of money. In 2013, traditional medicines worth US\$14 billion were sold in China. And in 2007, Brazil saw revenues of US\$160 million from traditional therapies which form part of a global market of more than US\$60 billion.

WHY TM cont'd

- In developing countries, TM represents an accessible and affordable medium of Primary Health Care (PHC) for the populace. A cross-section is shown below;

RATIO OF PRACTITIONERS TO POPULATION

	Traditional Practitioner	Medical Doctor
Swaziland	1:100	1:10,000
Ghana	1:200	1:20,000
Uganda	1:700	1:25,000
Mozambique	1:200	1:50,000

TM vs. ORTHODOX MEDICINE(OM)

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TRADITIONAL MEDICINE

Traditional medicines may not have all the answers. But a valid alternative

The drugs are readily available more research should be carried out on them

It is more cost effective since it is readily available to patients

The issue of drug resistance may not be as pronounced although more research should be conducted

ORTHODOX MEDICINE

Modern medicine is desperately short of new treatments

It takes years for a new drug to pass through research, development and then manufacture.

Economic burden for manufacture and procurement

Drug resistance has rendered many drugs (especially antibiotics) less efficacious

TM vs. OM cont'd

- Traditional medicines provide an alternative approach to health care in developed countries. This is necessary due to concerns about orthodox drug safety and the potential for greater public access to drug information.
- These facts have led to the collaboration between scientists and pharmaceutical companies to continuously research on/discover new drug sources.
- Major triumphs have stoked interest in TM as a source for highly efficacious drugs. The best known of these is the discovery of "*Artemisinin*" used to treat malaria.

THE CASE FOR TM

- Tradition: Been used throughout history.
- Natural: Perceived as gentler and safer.
- Cost: Often less expensive than prescription medicine.
- Access: Patient maintains control & no prescription(s) necessary.
- Synergism: A view that multiple ingredients working together yield better results.

THE CASE AGAINST TM

- Lack of FDA regulation and oversight leading to lack of standardized dosages and potential for adulteration.
- Safety and efficacy data are not always sufficient.
- Lack of research data is mostly due to lack of adequate or accepted research methodologies for evaluating TM.
- Strong reservations and often frank disbelief about the benefits of TM.
- Increased use of TM/CAM has not been accompanied by an increase in the quantity, quality and accessibility of clinical evidence to support claims of TM.

MEDICINAL PLANTS AND THEIR USES

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DRUG	BIOLOGICAL SOURCE	USES
Acacia gum	<i>Acacia senegal</i>	Emulsifying agent
Aloe	<i>Aloe spp</i>	Purgative
Belladonna	<i>Atropa belladonna</i>	Antispasmodic mydriatic
Caffeine	<i>Thea sinensis</i>	CNS stimulant
Caraway fruit	<i>Carum carvi</i>	Flavoring agent and calmative
Cascara bark	<i>Rhamnus purshiana</i>	Laxative
Castor oil	<i>Ricinus communis</i>	Purgative, vehicle of eye drop
Cinchona bark	<i>Cinchona succirubra</i>	Bitter tonic quinidine for atrial fibrillation
Coca leaf	<i>Erythroxylon coca</i>	Local anesthetic

EXAMPLES OF MEDICINAL PLANTS AND THEIR USES

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DRUGS	BIOLOGICAL SOURCES	USES
Digitalis	<i>Digitalis purpurea</i>	Myocardial stimulant
Ephedra	<i>Ephedra sinensis</i>	For relief of asthma and hay fever
Ergot sclerotium	<i>Claviceps purpurea</i>	Uterine stimulant
Gentian root	<i>Gentiana lutea</i>	Bitter used to stimulate appetite
Ginger	<i>Zingiber officinale</i>	Calmative and aromatic
Rauwolfia root	<i>Rauwolfia serpentina</i>	Psychiatric cases and anti hypertensive
Theophylline	<i>Thea sinensis</i>	Diuretic mild CNS stimulant
Tubocurarine	<i>Chondodendron tomentosum</i>	Muscle relaxant

SUMMARY

- Traditional medical knowledge is widely prevalent around the world and a large percentage of the public have integrated them for their various health needs.
- Although, continued community and public patronage is sustaining and fostering growth in developing and developed countries, there still exists a gap between public choice as well as national and institutional efforts for TM integration.
- High technology/external resource orientation and use in the development and distribution (markets) of medicines continues to marginalize traditional medical cultures in the health-care systems.
- The various stakeholders (regulators, consumers and practitioners) also see the challenges and issues differently.

SUMMARY Cont'd

- It is evident that any model of health-care based on a single system of medicine will find it difficult to cope with the health care demands in the near future.
- It is also obvious that traditional and cultural medical knowledge has a catalyzing effect in meeting health sector development objectives and will continue to be so.
- There exists major differences in the usage of TM in the developed and developing nations. While safety is the primary concern in developed countries, access and cost seem to be critical issues in developing countries.

CONCLUSION

- There is scant data on utilization of TM and a dearth of research policy and good integration models in the sector.
- It is essential not to romanticize TM use but seriously consider issues of safety, efficacy and quality, access and rational use.
- Integrate them into the mainstream health system without compromising the diversity and unique aspects.

ACKNOWLEDGEMENTS

- Pharmacist Bashir A.S
- Pharmacist Oluleti Lekan
- Pharmacist Okhuosami F.S

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