

Globalization Final Project: Asian and Alternative Medicines

Herbs (Student A)

1. **Cannabis** (3 main species *Cannabis sativa*, *Cannabis indica*, and *Cannabis ruderalis*)

History:

- indigenous to Central Asia and South Asia
- THC (tetrahydrocannabinol)- a psychoactive molecule

Uses:

- used for hemp
- medicinal purposes (cancer, AIDS, glaucoma, MS, neuropathic pain, Alzheimer's, spasticity, Tourette syndrome)
- recreational drug

Spread throughout World (timeline style):

- Cannabis seeds used as food [6000 BCE]
- Named as a sacred plant in India (god, medication) [1200 BCE]
- Hemp plant spreads throughout Europe [500 BCE]
- Smoking Cannabis becomes popular in the Middle East (since they couldn't drink alcohol) [1000 AD]
- Cannabis comes to the New World via Christopher Columbus [1492 AD]
- Farmers in America required to grow Hemp (GW and TJ grew it) [1619 AD]
- Medical Cannabis sold in U.S. [1840]
- Turkish smoking parlors all around Northeast US [1880 AD]
- Anti-marijuana/prohibition starts up in the 20th century in the US
- November 23rd- first legal café opens in Portland, Oregon

2. **Salvia** (*Salvia officinalis*, *Salvia miltiorrhiza*, *Salvia splendens*, *Salvia apiana*, *Salvia divinorum*)

History:

- widely distributed but originated in Central and South Western Asia
- salvia in Latin = "to save"
- most common *Salvia* species (*divinorum*- in Mexico)

Uses:

- religious use as an entheogen
- treat diarrhea, anemia, headaches, rheumatism, diabetes
- anti-oxidative properties, anti-bacterial, hypoglycemic, anti-inflammatory, fungistatic, virustatic, astringent, eupeptic and anti-hydrotic effects.

Spread throughout World (reasons rather than timeline due to its uniqueness):

- religious ceremonies and rituals
- shamans, mystics, experimenters
- potential drug against diseases
- press and media (recently gaining more press)
- legality

Works Cited

"[Cannabis](#)." *Cannabis*. Wikipedia. Web. 28 Nov. 2009.

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"[Milestones in the History of Marijuana](#)." *Marijuana History and Facts*. Brainz. Web. 28 Nov. 2009.

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Chinese Herbal Medicine (Student B)

Artemisia Annua (Sweet Wormwood)

- Native herb to China: *qinghao*
- Starting as early as 340 AD, known for treatment of fevers
- Rediscovered in 1971
 - Extracted artemisinin
 - found antimalarial extracts in monkeys and mice first
- Artemisinin is now available commercially in China and Vietnam as an antimalarial drug efficacious against drug-resistant strains of *Plasmodium*, the malarial parasite
 - Difficult to procure because concentration of artemisinin is very low, <1%

- Though more likely for malaria to reoccur
- Also known for treatment of cancer, fever, headaches, inflammation, infections, malaria
 - Shown to have stopped the division of cancer cells in the lab, but not clinically
 - Few scientific proof of treatment
- May be purchased from various herb sites, bottle of Artemisia extract

Astragalus (Membranaceus Root)

- Used in China for thousands of years: *huang qi*
- Native to northern and eastern parts of China, Mongolia, and Korea
- Generally combined with other herbs to strengthen body against disease (cancer and diabetes)
 - Antioxidants to protect cell damage from free radicals
 - Support immune system, prevent colds, respiratory infections, lower blood pressure, protect liver
- First appeared in the west in 1800s
- 1970s began to confirm its abilities to stimulate the immune system and fight virus and bacteria and inflammation
- Research in US to investigate ability as post-treatment for chemotherapy and radiation
 - Speed recovery and elongate life expectancy
- Studies in China show astragalus may aid those with heart disease by relieving symptoms

Works Cited

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Ehrlich, Steven D. "[Astragalus](#)." *University of Maryland Medical Center*. University of Maryland Medical Center, 25 Aug. 2008. Web. 03 Dec. 2009.

Ferreira, Jorge F.S., and Jules Janick. "[Distribution of Artemisinin in Artemisia annua](#)." *Center for New Crops and Plant Products*. Purdue University, 24 Aug. 1997. Web. 03 Dec. 2009.

Ephedra and Cloves (Student C)

Ephedra- Red fruits native to Mongolia and China.

- Known in China as “ma huang”.
- *Ephedra nevadensis*- “Mormon Tea”
- *Ephedra sinica*- Used to treat asthma.
 - Contains ephedrine

Ephedrine was isolated from ephedra in 1923.

- Pseudoephedrine is used as an over-the-counter decongestant.

- Gained recent usage in weight loss and energy supplements, because of evidence for short-term weight loss aid.
- Diet supplements containing ephedra banned by the FDA in 2004; chemically synthesized ephedrine not covered by ban, still used for asthma treatments.

Clove Oil- You know... cloves.

- *Syzygium aromaticum*- Indigenous to the Molucca Islands, grows in the West Indies, Asia, and Africa.
- Oil is steam distilled from the flowers for use as a topical anesthetic.
- Widely used in dentistry as an anesthetic (and a temporary filling) before novocaine, etc.
- Animal testing has suggested it could be used to suppress joint swelling in arthritis patients.

Why Asian and Alternative Medicine?

- In a world of modern medicine, why do herbs and folk treatments still have a place?
- Less invasive than many procedures used to treat disorders.
- Sometimes less expensive than mainstream treatments.
- Lack the stigma that “artificial chemicals” carry with them.
- Placebo Effect
 - “Placebo effects can arise not only from a conscious belief in a drug but also from subconscious associations between recovery and the experience of being treated—from the pinch of a shot to a doctor’s white coat. Such subliminal conditioning can control bodily processes of which we are unaware, such as immune responses and the release of hormones.” -Scientific American Feb. 2009 Issue
- Cater to Different Beliefs
 - May provide some relief to those whose religion forbid the use of modern medicine.
- Provides the motivation for alternative medicine's travel across the globe.

Conclusion: Asian medicines have been central to the theme of globalization. Medicine in general has traveled the world because it has a global appeal. Asian medicine today remains as a cultural mark on the western world- yet another example of the varied effects of globalization over the years.

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"[Herbs at a Glance: Ephedra.](#)" National Center for Complimentary and Alternative Medicine.
11/22/09

Spinella, Marcello. *The Psychopharmacology of Herbal Medicine: Plant Drugs That Alter Mind, Brain, and Behavior*. Cambridge, MA: MIT Press, 2001. Print.

Acupuncture (Student D)

1. Definition and general concept...

2. Brief history and how it was globalized

- The *Yellow Emperor's Inner Classic* (Huang Di Nei Jing) (Between 206 BC and 220 AD): One of the earliest sources of information on acupuncture
- The *Comprehensive Manual of Acupuncture and Moxibustion* (Zhen Jiu Jia Yi Jing) (282AD): Oldest existing classical text devoted entirely to acupuncture and moxibustion.... (brief description of moxibustion)
- Education in acupuncture in China reached its apex in 618 AD with the founding of the Imperial Medical College...
- Teachings to Korea, Japan and South-east Asia; Buddhist missionaries
- Refinement of acupuncture in the 16th century. Publication of the *Great Compendium of Acupuncture and Moxibustion* (Zhen Jui Da Cheng) in 1601: used by Darby de Thiersant in Europe (19th century) and by Soulie de Morant in the 20th century. George Soulie de Morrant systematically introduced acupuncture to the French and European medical communities.
- *Morand's Memoir on Acupuncturation*: Publication of the first documented practice and research of Acupuncture in the US (1825)
- Widespread awareness of acupuncture came to North America in 1971: James Reston
- (Very short narration of how acupuncture became popular in the US)

http://acupuncture.com/newsletters/m_mar08/Acupuncture%20Uganda%20Training.htm

3. Effect of globalization on acupuncture in China

4. Acceptance, research (very brief) and Integration

5. Uses

References

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"Needles, herbs, gods, and ghosts: China Healing And The West To 1848," Linda L. Barnes

“Chinese Therapeutical Methods Of Acupuncture And Moxibustion,” *Research Institute Of Acupuncture And Moxibustion, Academy of Traditional Chinese Medicine, Peking*

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