

# Ethnobotany. Lecture 27

Alexey Shipunov

Minot State University

April 1st, 2011

# Outline

- 1 Complementary and alternative medicine (CAM)

# CAMs

- Whole medical systems such as homeopathy, naturopathy, TCM, and Ayurveda
- Mind-body medicine such as meditation, prayer, mental healing, art therapy, music therapy, and dance therapy
- Biologically based practices such as dietary supplements, herbal supplements, and other scientifically unproven therapies such as shark cartilage
- Manipulative and Body-Based Practices such as spinal manipulation (both chiropractic and osteopathic) and massage
- Energy therapies such as qi gong, reiki, therapeutic touch, and electromagnetic therapy

# Alternative approaches used plants

- Medical herbalism
- Homeopathy
- Antroposophical medicine
- Aromatherapy
- Flower remedy therapy
- Naturopathy

# Medical herbalism

- Based on pre-scientific traditions of European cultures
- Holistic approach, similar to Eastern practices

# Conditions treated

- Normally, chronic conditions which are not treated well in common medicine
- Eczema, arthritis, depression, migraine, PMS and others

# Differences from rational phytotherapy

- Typically, combination of 4–6 herbs (assumes synergy)
- Most of remedies are taken as tinctures
- There is a flow of information between phytotherapy and herbalism

# Homeopathy

- Samuel Hahnemann (Germany, 1755–1843) founded homeopathy
- “Likes cures like”
- Always minimal dose and extremely high dilutions!
- One remedy at a time

# Samuel Hahnemann (1755–1843)



# Modern homeopathy

- They believe in stimulating of body's own “vital force”
- “Vital force” is strongly individual

# Remedies

- Highly diluted (and poisonous when undiluted)
- 65% originates from plants

# Evidence

- Despite of hundreds of trial, results are still controversial
- Some experiments on “water memory” provided the support for dilution theory, but scientific value of these experiments is also dubious

# “Nature” publication of Benveniste group (1988)



## Access

To read this story in full you will need to login or make a payment (see right).

Journal home > Archive > Scientific Paper > Full Text

## Scientific Paper

*Nature* **333**, 816-818 (30 June 1988) | doi:10.1038/333816a0; Received 24 August 1987

## Human basophil degranulation triggered by very dilute antiserum against IgE

E. Davenas, F. Beauvais, J. Amara\*, M. Oberbaum, B. Robinzon<sup>†</sup>, A. Miadonna<sup>‡</sup>, A. Tedeschi<sup>‡</sup>, B. Pomeranz<sup>§</sup>, P. Fortner<sup>§</sup>, P. Belon, J. Sainte-Laudy, B. Poitevin & J. Benveniste<sup>||</sup>

### ARTICLE TOOLS

-  Send to a friend
-  Export citation
-  Export references
-  Rights and permissions
-  Order commercial reprints
-  Bookmark in Connotea



Michigan State  
UNIVERSITY

# Anthroposophical medicine

- Rudolf Steiner (Germany, 1861–1925) founded anthroposophy and related medicine approach
- Three functional systems: sense-nervous, reproductive-metabolic and rhythmic
- Popular in Germany, Austria and other continental Western European countries

# Rudolf Steiner (1861–1925)



# Conditions treated

- The approach is therapeutic, but sometimes used for supportive treatments of serious diseases like cancers
- Several German hospitals practice anthroposophical medicine

# Antroposophic medicines

- Normally are combinations of plant components (often diluted) and minerals
- Mistletoe from different trees is a source of common drug “Iscador”
- Plants should be specifically grown in accordance to anthroposophic “biodynamic farming”

# Mistletoe, *Viscum album*, Santalaceae



# Aromatherapy

- Rene-Maurice Gattefosse (French perfumer, 1881–1950) is a founder of aromatherapy
- Main idea is that essential oils could be used to provide general well-being
- Aromas are prescribed holistically, in terms of “energy” etc.

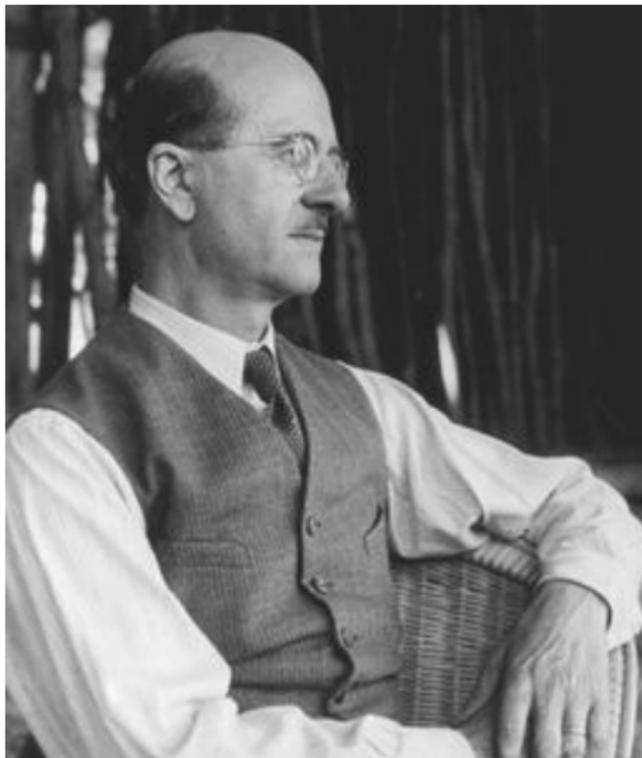
# Conditions treated

- All conditions which require relaxation
- Skin diseases, different chronic disorders etc.

# Aromatherapy medicines: essential oils

- Used in combinations
- Mostly by massage, but also by baths, inhalations, compresses and other external ways

# Rene-Maurice Gattefosse (1881–1950)



# Efficacy

- Sometimes work in relation with conventional phytotherapy
- However, most of uses were not proved scientifically

# Flower remedy therapy

- Edward Bach (UK, 1886–1936) invented the idea of flower remedies
- Every remedy is a flower extract which is supposed to heal specific condition

# Edward Bach (1886–1936)



# Remedies

- Whole flowers which are dried and/or boiled to prepare tincture or water essence
- Single species are used in majority of cases

# Efficacy

- Nothing has been proved scientifically
- Requires future research

# Naturopathy

- Combination of “natural”, “organic” methods of medicine including herbalism
- Similarly to other practices, individualistic and holistic

# CAM in USA

- There are multiple accredited schools of CAM
- National Center for Complementary and Alternative Medicine focuses on research and integration of CAM techniques and practices

# NCAM Web site

NATIONAL INSTITUTES OF HEALTH

**NCAM** National Center for Complementary and Alternative Medicine

Search

Health Info **Research** Grants Training News and Events About NCCAM

What Is CAM? Be Informed Topics A-Z Herbs Clinical Trials For Health Professionals En Español

## Health >

### Topics A-Z >

Research-based info from acupuncture to zinc.

### What is CAM? >

This overview defines complementary and alternative medicine, introduces safety issues, and more.

### Be Informed >

Learn how to find out what's safe and



## Chronic Pain and CAM

If you are considering a CAM therapy for chronic pain, this information can help

1 2 3 4

## Research Results >



**Mindfulness Meditation Is Associated With Structural Changes in the Brain** (Jan 2011)

## Get Updates:

Stay informed via email, RSS, Twitter, or Facebook



## News >

- **New Job Opening: Management Analyst** (Deadline: April 1, 2011)
- **Recall of U-Prosta Dietary Supplement** (FDA)
- **Beware of Fraudulent 'Dietary Supplements'** (FDA)
- **Tea Tree Oil—Uses, Side Effects, Research**
- [See all news items](#)

# Summary

- Alternative medicine approaches are widely used different herbal remedies
- However, efficiency for most of these methods has not been scientifically proved

# For Further Reading



## A. Shipunov.

*Ethnobotany* [Electronic resource]. 2011—onwards.

Mode of access:

[http://ashipunov.info/shipunov/school/biol\\_310](http://ashipunov.info/shipunov/school/biol_310)



## M. Heinrich and others.

*Fundamentals of pharmacognosy amd phytotherapy* (selected chapters). [Electronic resource].

Churchhill Livingstone, 2004.

Mode of access: [http://ashipunov.info/shipunov/school/biol\\_310/heinrich2004\\_fund\\_pharm\\_part.djvu](http://ashipunov.info/shipunov/school/biol_310/heinrich2004_fund_pharm_part.djvu)

**Pages 184–196.**