Part II: Anthropology and medical systems

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Approaches to medical anthropology

- Biological ⇒ Part I, II
- Ecological ⇒ Part II
- Ethnomedical ⇒ Part II (The major focus)
- Critical ⇒ Part III, IV
- Applied ⇒ Part III, IV

Medical anthropology encompasses all subfields of anthropology, so it has approaches as much as the number of the subfields.
A brief review of biological and ecological approaches

- Biological anthropology in Medicine and Health: Assumptions, explanations of chronic diseases.
- Ecological anthropology: Key concepts, 2 subfields and research examples.
Biological anthropology in medicine and health

Assumptions:

› Diseases are affected by human genetic variation.

› Genetic variation is a part of evolutionary processes (adaptation to environment).
Diseases of civilization

- Heart disease, Diabetes, Cancer
- Obesity and high consumption of refined carbohydrates/fats $\Rightarrow$ increased incidence of heart disease and diabetes.
Ecological anthropology

- The intersection of culture, human beings, ecological environment, and medicine.
- Ecological environment: natural phenomena, the products of large-scale human activity.
2 subfields (theoretical orientations) within ecological anthropology

- Cultural ecology
- Political ecology
Cultural ecology

- Examines how cultural beliefs and practices shape human behavior, and how this relates to health and diseases.
- For example, Vietnamese building practices, “stilted houses (constructed above the 10-foot mosquito flight ceiling) are a preventative measure against mosquito bites.
Political ecology

- Examines political conflict, migration, global resource inequality, and how these relate to health and diseases among particular groups of people.
- For example, construction of dams alter ecology, which leads to homeostatic imbalances between human populations and parasitic infections.
A study of medical systems among particular ethnic groups worldwide.
A medical system

- All the health-promoting beliefs and actions as well as scientific knowledge and skills of the members of the group that subscribe to the system.

(Foster and Anderson, 1978)
2 components of a medical system

- A set of the following:
  - Disease theory system
    - Cultural beliefs regarding health, illness, and medicine
  - Healthcare system
    - Providers (doctors, healers, etc.)
    - Medicines and facilities
    - Policies and institutions
3 sectors of a medical system

- The professional sector
- The folk/traditional sector
- The popular sector

(A. Kleinman, 1980)
Organized health professions.

Biomedicine belongs to the professional sector.
- Medical doctors
- Nurses
- Physical and occupational therapists
- Pharmacists etc.
Folk/traditional sector

- Non-professional specialists
  - Shamanism
  - Rituals
  - Herbal therapy
  - Bone-setting
Family care

Care by the family members is the most common as well as the first step to the treatment of the illness and injuries.
More than one medical system exists in one society. For example, African villages: biomedicine often coexists with indigenous folk medicine. Witchcraft or mystical causes ← A diviner treats the illness.
Medical syncretism (bricolage)

- Combination of different or opposing schools of thoughts or medical practices.
- For example, in cancer treatment, we go to see a doctor in a hospital, but we may also take herbal medicine or buy amulets, etc.
Illness, Disease, Sickness

Sickness

Illness

No Illness

Disease

No Disease

Healing

Curing

Source: Young A. 1982
A Case Study: The Spirit Catches You and You Fall Down, by Anne Fadiman
Objectives

- Explore the differences between the Western medical system and the Hmong Medical system.
- Understand how and why a clash occurred between medical doctors in a small county hospital in California and a refugee family from Laos over the case of Hmong child Lia Lee.
Family and ethnic background of Lia Lee

- Birth
- Ethnic origin
- Cultural beliefs and practices surrounding delivery and birth
- Child rearing practices
Birth

- Mother: Foua
- Father: Nao Kao
- Parents’ fourteenth child, born in the Merced Community Medical Center (MCMC) on July 19, 1982.
  - MCMC is a county hospital, modern and clean.
  - MCMC is a teaching hospital, staffed partially by the faculty and residents of the Family Practice Residency.
  - MCMC has been plagued with financial problems. No funds are available to hire interpreters.
Ethnic origin

- Hmong: the Hill tribe in Laos, Southeast Asia
- The Lees are among the 150,000 Hmong who fled Laos in 1975
Hmong’s birthing process

- Labor is at home.
  - No birth attendant is present.
  - A woman in labor squats on the dirt floor and delivers a baby into her own hands.
  - Her partner (husband) cuts the umbilical cord with heated scissors and ties it with a string.
  - The mother washes the baby with water.
Placenta

- The father digs a hole at least two feet deep in the dirt floor and buries the placenta.
- The word for placenta in the Hmong language means “jacket.”
Beliefs about the soul

- The placenta is the baby’s first and finest garment.
- When a Hmong dies, his or her soul must travel back from place to place until it reaches the burial place of its placental jacket.
- Once the soul wears the jacket, it can continue its journey to reunite with its ancestors.
- If the soul cannot find its jacket, it is condemned to an eternity of wandering, naked and alone.
Lia’s placenta

- Lia’s placenta was incinerated.
- Most doctors at MCMC refused to give the placenta back to the family.
  - They assumed that the women planned to eat the placentas and found the idea disgusting.
  - They feared the possible spread of hepatitis B.
- Foua never thought of asking the doctors for Lia’s placenta since she did not speak English when she delivered Lia.
Child rearing

- A baby was never apart from its mother, sleeping in her arms all night and riding on her back all day.
- Small children were rarely abused.
- They believed that a dab who witnessed mistreatment might take the child, assuming it was not wanted.
Lia’s illness

- When Lia was 3 months old, her older sister Yer slammed the front door of the Lee’s apartment.
- A few moments later, Lia’s eyes rolled up, her arms jerked over her head, and she fainted.
- Lia had at least 20 more seizures before her parents carried her to the emergency room at MCMC.
Hmong’s etiology: The cause of Lia’s illness

- Qaug dab peg (The spirit catches you and you fall down.)
- The spirit is a soul-stealing dab.
- In Hmong-English dictionaries, qaug dab pet is generally translated as epilepsy.
- Hmong see the illness as an honor. In their culture, a person suffering from this disease is believed to have a special power.
Foua and Nao Kao’s feelings

- Their emotions were a mixture of concern and pride.
- They thought Lia might be a special person.
- Lia was their favorite child, whom they hugged and kissed the most.
Diagnosis by the doctors at MCMC

The first visit was on October 24, 1982.

- The diagnosis was “early bronchiopneumonia or tracheobronchitis.”
- Lia’s seizures had stopped by the time they reached the hospital.
- Her only symptoms were a cough and a congested chest.
- The resident on duty ordered an x-ray, and a radiologist made the diagnosis.
The third visit was on March 3, 1983. The doctor on duty was Dr. Dan Murphy, a family practice resident. Lia was still having seizures when Foua and Nao Kao carried her into the emergency room. They were accompanied by an English-speaking cousin. Dr. Murphy diagnosed Lia’s condition as epilepsy.
Dr. Murphy admitted Lia to MCMC as an inpatient.

For three days, she underwent various tests:
- A spinal tap
- A CT (computerized tomography) scan
- An EEG (electroencephalogram)
- A chest x-ray
- Extensive blood work

She was discharged on March 11, 1983.

Dr. Murphy prescribed medication to be taken at home.
- Ampicillin and Dilantin elixir (anticonvulsant)
Between the ages of 8 months and 4 and a half years, Lia was admitted to MCMC 17 times.

She made over 100 outpatient visits to the emergency room and to the pediatric clinic at the Family Practice Center due to seizures.
Dr. Neil Ernst and Dr. Peggy Philp

- These are the pediatricians who were in charge of Lia's care whenever she was taken to the hospital.
- They are married to each other.
- Their personalities: idealists, workaholics
- Their reputation: highly recognized, successful doctors
Nurses tied Lia to her bed. She was administered various types and doses of medicine one by one for her seizures. Her drug regimen became very complicated and underwent many revisions.
Medicines administered to Lia over the 4 years.

- Tylenol
- Ampicillin
- Amoxicillin
- Dilantin
- Phenobarbital
- Erythromycin
- Ceclor
- Tegretol
- Benadryl
- Pediazole
- Vi-Daylin Multivitamins with Iron
- Alupent
- Depakene
- Valium

- In less than 4 years, Lia’s prescription was changed 23 times.
- The medicines were prescribed in varying combinations, amounts, and number of times a day.
Since Foua and Nao Kao could not read, they had no idea what the labels and instructions of the medicine bottles said and had difficulty in measuring the correct doses of medicines.

They failed to administer Lia’s medications correctly.

The side effects of the medications were so serious that they had become increasingly reluctant to give the medications to Lia.
On May 1, 1985, Dr. Ernst requested that the Health Department and Child Protective Services remove Lia from the custody of her parents.
December 5, 1986
Lia was taken to MCMC by ambulance.
Dr. Dave Schneider, a second-year resident, examined her and diagnosed her illness as:
- Severe hypoxic brain damage
- Pseudomonas septicemia
- Severe seizure disorder
- Status post disseminated intravascular coagulation
- Status post septic shock
Doctors vs. parents

- Foua and Nao Kao wanted to stop treatment because they thought the medicines were killing Lia.
- Dr. Philp misunderstood that her parents wanted her to die with dignity.
- Dr. Schneider was very angry when he found that Nao Kao had pulled out Lia's NG tube and carried her in his arms.
- Lia left MCMC and was taken to her home.
Nao Kao said,

“Lia was going to die if she stayed in the hospital ... but we boiled up some herbs, and we washed her body. At the hospital, she was so sick that when she was sleeping on the bed, she sweated so much that her bed got all wet. She had too much medicine, and her body just gave way. But we boiled the herbs and we washed her, and her sweating stopped, and she didn't die.”
Lia did not die, nor did she recover.
She lay suspended in time, growing only a few inches, gaining little weight, always looking far younger than her age.
Some universals in medical systems (Foster and Anderson, 1978)

- Medical systems are integral parts of cultures.
- Illness is culturally defined.
- All medical systems have both preventive and curative sides.
- Medical systems have multiple functions
  - A disease theory system provides a rationale for treatment.
  - A disease theory system explains "why"
    - Why did it happen to me at this time and this place?
Summary questions

- Why do you think such a tragedy happened to Lia Lee and her family?
- What did you learn from this case?
  - How can we promote cultural understanding in healthcare provision?
  - How can we promote medical pluralism in our society?
  - Soul or body?
Biomedicine

- Biomedicine as a cultural system (an ethnomedicine).
- The philosophical root of biomedicine.
- The basic underlying assumption of the biomedicine.
- Characteristics of biomedical knowledge.
Ancient Greek philosophy.
Western science shares this philosophical root.
There is a fundamental, permanent, universal reality behind the changing and often chaotic surface of events.
Characteristics of biomedical knowledge

- Materialist:
  - Reality is basically material.
  - Nature is physical.
  - We can obtain objective knowledge (independent from our senses, methods, or instruments).

(Pool and Geissler, 2005)
Characteristics of biomedical knowledge

- **Reductionist view of sickness:**
  - Sickness is confined to **individual physical bodies** (rather than being a social phenomenon).
  - Therefore, it is **reducible** to the malfunctioning of the basic material building blocks (cells, molecules).
  - The signs of sickness are **visible** under the microscope or in the test tube.

(Pool and Geissler, 2005)
Mystification

Biomedicine mystifies social, economic, and political problems by making them appear individual, biological, and natural.

- For example, poverty is responsible for malnutrition.

Biomedicine hides (ignores) the social causes of sickness, which legitimizes the unequal distribution of sickness and resources.

- This process may suppress possible protest.
Medicalization

- Viewing social phenomena from the medical viewpoint.
- Social Phenomena are medicalized.
  - Social causes
  - Social problems
  - Social reality
- Medical and public health intervention on the child abuse focuses on the deviant behavior of the mother (and the father), rather than the whole historical process of the formation of the nuclear family and changing relationships between a mother (or a father) and the child.
The extension of biomedicine into areas of life that were previously considered social rather than medical (e.g., birth, dying).
The expansion of the power and influence of medical experts, sometimes even to the extent that medicine takes on a deviance-control function (e.g., child-abuse cases).
Implications for public health interventions

- Public Health (PH) assumptions of culture:
  - Cultural and social processes are determinate
  - Can be manipulated in a preplanned manner with anticipated outcomes.

- PH aims of intervention:
  - To change social practices and processes in a preordained and scientific manner.

(Pool and Geissler, 2005)
Implications for public health interventions

- PH rationale for conducting a behavioral research:
  - To know people's beliefs, attitudes and practices.
  - In particular “wrong beliefs” and “misconceptions.”
    (wrong in terms of biomedicine...)
When such an intervention fails

- Ignores complexity and messiness of culture (rules, codes of conduct) enacted in a real life:
  - Culture both as public and private
  - Culture in one’s head, culture in action.

- Treats culture as a “thing” or “cause” that independently affects human behavior.
Culture as a heuristic device

- Heuristic: Helps us to think about or better understand what people do and why they do it.
- We employ the concept of culture so as to approach to the lived experience of the people.