21A.215 Medical Anthropology
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Health, Disease and Healing in the Larger Social Context IV

Monday Nov. 17, 2008

Read: Farmer 95-176

I. How do we evaluate health cross-culturally?

A. Basic assumptions: economic development, progress and optimal health go together, always considered to be goals for all societies

B. “Progress” consists of:

1. Increased incomes
2. Higher standards of living
3. Greater security
4. Better health
5. These are thought to be positive, universal goods

C. Development planners will concede that yes, traditional peoples had to sacrifice their traditional cultures

1. But see this as a small price to pay for such obvious advantages

D. Civilization is associated with ease, affluence, security

1. “Primitive” life is “nasty, brutish, and short” (Thomas Hobbes)
2. DISCUSS: what is the opposite position to the one above—that “primitive” = good, “civilized” = bad?

E. The usual criteria used to assess level of development: GNP (gross national product), per capita income, capital formation, employment rates, literacy, formal education, consumption of manufactured goods, number of doctors and hospital beds per thousand persons, amount of money spent on government welfare and health programs

F. But embedded in these measures are the assumptions that a more Western culture is better, and movement toward Western standards of living implies “progress.”

1. DISCUSS: when is this not true, or at least questionable?
II. How to assess health, well-being in a less ethnocentric way?

A. For example, standard of living is a widely agreed-upon measure

1. But who gets to dictate the criteria, and to measure progress toward the goal of a higher standard?

B. Example:

A 1954 government report for Micronesia indicated specifically that since the population was still largely satisfying its own needs within a cashless subsistence economy “money income is not a significant measure of living standards, production, or well-being in this area”¹

1. But the government soon switched to a measure using imported consumer goods as indicators of a higher standard of living in the islands

a. Of course then a low standard of living was found

b. DISCUSS: imported consumer goods as a reliable measure?

1) Who would benefit from a decision to use this measurement?

2) How would Micronesia’s inhabitants benefit from more imported goods?

a) Remember the Nestlé baby formula case?

3) How would they not benefit?

C. For some purposes we need a more cross-culturally neutral one that can be universally applied; here’s one:

1. Does progress or economic development increase or decrease a given culture’s ability to satisfy the physical and psychological needs of its population, or its stability?

a. This notion of determining the standard of living is not pegged to the standard economic correlates of development

¹ Some of the material for this discussion comes from John Bodley, *Victims of Progress*, 2nd ed. Palo Alto: Mayfield, 1982: 149-159.
2. The extent to which the needs, values, aspirations, and life expectations as defined by a particular group of people can be met in their current life circumstances (emphasis mine)

III. Evaluation using more cross-culturally neutral criteria

A. First: what are the basic needs that have to be met in all societies?

1. **DISCUSS**: Food, shelter, potable water, breathable air…?

B. Second: operationalizing these: coming up with categories that permit measurement, quantification

1. Quantifiable measures:
   a. Nutritional status
   b. General physical and mental health
   c. Incidence of crime and delinquency
   d. Demographic structure
   e. Family stability
   f. The society’s relationship to its natural resource base

2. **DISCUSS**

C. How to operationalize the following criterion: “The extent to which the needs, values, aspirations, and life expectations as defined by a particular group of people can be met in their current life circumstances”?

1. Possible areas:
   a. Importance of material goods
   b. Extensive ties with extended family vs. mobile nuclear family
   c. Amount of free time

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1) The San Bushmen of the Kalahari desert in Southern Africa, when they were still hunter-gatherers worked 3 to 4 hours a day per adult

2. DISCUSS: Others?

IV. Findings so far:

A. Self-sufficient or even semi-autonomous societies

1. Invariably have experienced a lowering of standard of living with economic progress—and often to a dramatic degree

   a. A possible exception would be those few societies brought back from extinction by some program

   b. But these populations really don’t qualify because they were not self-sufficient prior to economic development

   c. Something had already caused their precipitous decline

2. This includes those groups which experienced well-intended change

   a. Introduced by agents promoting positive change and improvement

3. The actual results:

   a. Poverty, longer working hours, much greater physical exertion, poor health, social disorder, discontent, discrimination, overpopulation, and environmental deterioration (along with, of course, the destruction of the traditional culture)

4. Why these results?

   a. DISCUSS

V. Some answers:

A. “Diseases of development”

1. Pathological conditions resulting from the usually unanticipated consequences of the implementation of developmental schemes

2. Economic development can increases the disease rate in 3 ways
a. First: to the extent development is successful, the populations are suddenly vulnerable to all the diseases enjoyed by “advanced” people

1) Example: comparison of 3 groups

a) Pukapukans of the Cook Islands—relatively isolated and traditional

b) Rapidly developing Rarotongans (also Cook Islands)

c) Europeanized Maoris of New Zealand

2) An 8-year study:

“We are beginning to observe that the more an islander takes on the ways of the West, the more prone he is to succumb to our degenerative diseases.”

a) Pukapuka: relatively low levels of imported sugar and salt intake, low levels of heart disease, high blood pressure, diabetes

b) Rarotonga: economic success was introducing town life, imported food, motorcycles: sugar and salt intakes nearly tripled. High blood pressure increased approximately ninefold, diabetes two- to threefold, heart disease doubled for men and more than quadrupled for women, while the number of grossly obese women increased more than tenfold. ³

c) New Zealand Maori: sugar intakes were nearly 8 times that of the Pukapukans, gout in men was nearly double the Pukapuka rate, diabetes in men more than fivefold higher, and heart disease in women had increased more than sixfold.

(1) Maori were dying of these conditions at a greater rate than the New Zealand Europeans.

b. Second: the project disturbs traditional environmental balances, may dramatically increase certain bacterial and parasite disease

1) Africa: sleeping sickness increased in many areas of Africa, spreading even to areas where it did not formerly occur.

2) Building new roads, migratory labor, large-scale relocation schemes.

3) Dams and irrigation developments created ideal conditions for rapid proliferation of snails carrying schistosomiasis.

4) DDT controls malaria (still used in developing countries), but the mosquitoes are continually evolving resistant strains.

5) Or create new diseases, often trans-species—Ebola, AIDS, Avian flu, Lyme disease.

c. Third: when goals prove unattainable, an assortment of poverty diseases may appear in association with crowded conditions of urban slums and general breakdown in traditional socioeconomic systems.

1) Note that urbanization is a prime measure of development.

2) But urban health standards are abysmally poor in Asia, Africa, Latin America.
   a) And in the blighted ghettos of First-World cities.
   b) In parts of New York City TB rates are much, much higher among welfare recipients.\(^4\)
   c) Farmer cites studies showing seventy times more than the national average.

3) People come to urban areas seeking wage employment.
   a) But, unlike in the country, everything costs money.

4) Infectious diseases related to crowding and poor sanitation.

5) Increased stress and poor nutrition aggravate other health problems.

B. Dietary change

1. Traditional diets admirably adapted to the nutritional needs and available food resources of formerly self-sufficient societies
   a. Even Eskimo (Inuit)
   b. All groups at first resist attempts to change diets
      1) But they can be induced to become dependent on difficult-to-obtain imports
         a) Sometimes these are identified with powerful outsiders and come to be deliberately sought
      2) Example: Vaupés Indians buying canned sardines when there are fish in the rivers
      3) Non-natives will make fun of traditional diet
   c. Traders who will profit often promote the items with clever advertising campaigns
      1) Example of associating infant formula with “modern mothering”

2. At other times development schemes have forced negative change in diet
   a. Because of new food crops (cash crops), forced relocation, creation of national parks and game reserves
      1) Examples: colonists turning Australia into sheep ranches, killing off the buffalo in the U.S. plains
   b. Wage laborers find they don’t have the time to secure traditional foods
      1) Find they have to spend cash on costly and often nutritionally inferior manufactured foods

3. Overall, dietary changes linked to increased involvement in the market economy have tended to lower rather than raise the nutritional levels of the affected peoples
   a. Vitamin, mineral and protein components of diets reduced, replaced by enormous increases in starch and carbohydrates
   b. Often white flour and refined sugar
4. Sometimes even nutritional aid has unintended consequences
   a. In Brazil a program to supply milk to protein-deficient communities actually caused an epidemic of permanent blindness by aggravating a preexisting vitamin A deficiency very dramatically

C. Teeth
   1. Example: in a 1894: article in the Journal of the Royal Anthropological Institute compared the teeth of ten Sioux Indians that came to London with Buffalo Bill’s Wild West Show to the teeth of a sample of Londoners
      a. Completely free of caries and in possession of all their teeth
         1) Even though half the group were over 39 years old
      b. Difference was attributed to the wear and polishing caused by the traditional diet of relatively coarse food
      c. They chewed food longer (absence of tableware)
      d. And no refined sugars
   2. Another study of the Eskimo (Inuit)
      a. Those subsisting entirely on traditional food, caries were totally absent
      b. Caries increased with degree of dependence on purchased or government supplied food, to 48% among Vancouver Island Indians, who had the most contact
         1) They didn’t have modern dental care, suffered horribly
      c. Systemic infections resulting from untreated infected teeth undermined the population’s resistance to many new diseases, including T.B.

D. Malnutrition
   1. Particularly in form of protein deficiency
   2. Protein deficiency not found for untouched populations but those having to adopt new economic patterns
a. Due to population pressures, cash cropping, government programs

b. There are programs to get farmers to replace foods richer in protein with substitutes high in calories, lower in protein

c. Millet and sorghum in some parts of W. Africa being replaced by manioc and plantains (cash crops)

3. Wage laborers and cash croppers don’t have enough earnings to purchase adequate protein

4. Study in Brazil of families where agricultural laborers were forced to systematically deprive nonproductive members (children) of their households of adequate nutrition to satisfy the need of the productive members

a. A study of sisal plantations that had replaced subsistence farms

b. Turning the plant leaves into marketable fiber required huge amounts of energy

VI. Conclusions

A. First, “progress” is an ethnocentric notion

1. One always has to ask: who benefits?

2. All too often “progress” is a euphemism, a cover-up for what’s going on

B. Second: the nature of colonialism

1. Colonialism justified itself saying it was bringing civilization, progress to colonies

   a. A self-serving position, even though administrators did believe it

2. Colonialism resulted in deaths of literally millions of tribal people

   a. And those who survived experienced:

      1) Loss of land

      2) Loss of sovereignty

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3) Loss of right to choose how they wanted to live (self-determination)

3. Colonialism’s goals were:
   a. Cheap labor
   b. Extracting natural resources
   c. Acquire militarily useful sites
   d. Open up markets
   e. **DISCUSS:** does anyone have an example?

4. The colonial system had to be maintained by force

C. Third: neocolonialism emerged from colonialism as European colonial powers had to cede power and let their colonies become independent
   1. But formal political independence could not undo the profound social and economic entanglements between colonizer and colonized
   2. These ties continue
   3. Like colonialism, the political economy of neocolonialism has to do with the centrality of material interest and the use of power to protect and enhance that interest.

D. Many development projects, even the well-intended ones, reveal neocolonial interests promoting them
   1. Example: a Torres Strait island community who resisted—almost to the point of bloodshed—government efforts to establish a store that would make imported food available
   2. The government prevailed, and investigator established a clear relationship between length of time store was established and increasing incidence of caries, where there had been none before