



REFUGEE AND IMMIGRANT HEALTH CARE

Chris Carlsten - R3, University of Washington
Carey Jackson - Director, International Medicine Clinic; Associate
Professor of Medicine, University of Washington
6/5/03

"When you hear hoof beats think horses . . . Unless you're on the Serrengeti or the Plain or Jars."

Note: Structure of this handout is to briefly address the following topics in general (since you have heard about most of them in multiple other venues) and to focus more detail on the aspects that are unique/most pertinent to immigrants.

Refugee/asylee: A person who, because of a well-founded fear of persecution on account of race, religion, nationality, membership in a particular social group, or political opinion, is forced to flee the country of his or her nationality and is unwilling or unable to seek the protection of his or her government. Refugee status is determined by Immigration and Naturalization Service (INS) before entering the US for refugees and after entering the US for asylees. "Immigrant" is a more general term, with the refugee sub-cohort more susceptible in particular to psychiatric disease.

- I. General
- II. Displacement(war)/access to care(interpretation services)
- III. TB
- IV. Hepatitis B
- V. Hepatitis C
- VI. Common parasites
- VII. HIV
- VIII. Mental health
- IX. End of life issues

I. General

- 99.3% of US population is immigrant (i.e. non-native American)
- Arrivals frequently reflect ethnic strife abroad (Vietnamese, Loatian, Hmong, Cambodians, Ethiopians, Bosnians, Croats, former Soviets)
- A touch of anthropology (Kleinman 1978): *Disease* refers to malfunctioning/maladaption of biologic/psychophysiologic processes and is mainly a Western concept; *Illness* refers to personal, interpersonal and cultural reactions to disease. Studies show that developing societies have traditionally been concerned with illness, evidenced by healers trying to provide a meaningful explanation, to patients and communities, for illness. In contrast, biomedicine (essentially Western) is primarily interested in the recognition and treatment of disease ("curing").
SEE APPENDIX
- **Screening:**
 - i. Nutritional (especially children*)
 - ii. Psychiatric (anxiety, depression, PTSD, physical abuse)
 - iii. Infectious disease (focus on diseases of the country of origin)
 - iv. Health care maintenance (Pap smear, immunization – basics often not done in country of origin; social support/access to care)→ INS requires: PPD +/- CXR, RPR, HIV
à HMC International Clinic generally adds: CBC (mainly looking for anemia), O+P (versus empiric albendazole, see below), Hep A, B and C (see details below), age appropriate immunization per CDC protocol

* Children are particularly vulnerable, but not seen in HMC International Clinic. One study (Meropol 1995) of refugee children in one large US city found that only 39% had adequate vaccination.

CENTERS FOR DISEASE CONTROL AND PREVENTION EXCLUDABLE CONDITIONS (currently exclude immigration)
Communicable diseases of public health significance
Infectious tuberculosis
HIV disease
Syphilis and other STDs
Hansen's disease (leprosy)
Physical and mental disorders with associated harmful behaviors
Psychoactive substance abuse and dependence
Other physical or mental abnormalities, disorders, or disabilities

What is 'discovered' via the above screening protocols?

REFUGEE HEALTH ASSESSMENT RESULTS (7/1/93- 6/30/95)	
Tuberculosis	
PPD tested	PPD positive
92,838 (89.2%)	40,092 (43.2)
Parasites of Stool	
Total tested	Total positive
57,761 (55.5%)	17,289 (29.9%)
Syphilis	
Total tested	Total positive
17,179 (16.5%)	234 (1.4%)
Immunizations	
Total screened	Not current
35,434 (34.0%)	18,254 (51.5%)
Hepatitis B	
Total tested	HbsAg positive
44,299 (42.6%)	2712 (6.1%)
<i>Data from Division of Quarantine, Centers for Disease Control and Prevention, Atlanta, 1998, as reported by Walker (1999). Specifics vary by country of origin – see CDC website.</i>	

II. Displacement(war)/access to care (interpretation services)

In our country we don't have a thing called before and after war. Since we are born we come to the war. . . that's how we are created -Kurdish man

- Immigrants' health care is directly affected by the socio-political climate in their countries of origin
 - Poor accountability and infrastructure leads to waste of funds intended for vaccination, screening for common cancers, infectious disease, etc. Immigrants import these accumulated health care deficits.

- Trade embargoes, such as that imposed for years on Iraq, harms millions of innocent citizens. Even if exemptions are made for medicines, the effect is devastating; the harm transfers through the immigration process.
- 'Post -emergency phase' camps, which include millions of transients (i.e. future immigrants), are sites of highly prevalent morbidity and mortality (with particularly increased rates of physical abuse and psychological torture, infectious disease due to poor sanitation, and reproductive health; NOTE: This has recently been challenged by one investigator [Hynes 2002]).
 - Understanding the morbidity patterns associated with the camps, both in general (Hollifield 2002) and specifically (Spiegel 2002), may aid health care of those individuals who ultimately leave the camps (i.e. as immigrants to the US).
- In general, immigrants are among the poorest citizens in Western countries and are prominent among the approximately 15% of the US population which lacks health insurance.
- Basic concepts such as the importance of prompt, reliable follow-up for health care appointments and of reimbursement systems can be easily misunderstood.
- Immigrants face severe communication barriers. The risk for confusion regarding any of the myriad interactions, tests and studies is high, and this is often problematic and even life threatening at times. Family members are often used as interpreters and may be counter-productive given inherent biases and conflicts.
 - Bad paraphrasing/lack of linguistic equivalence, impatience, interpreter beliefs/bias, ethnocentrism, and role conflicts are among the complicating factors in interpreter services (Jackson 1998).
 - The level and intensity of interpretation required is shaded by the patient's gender, authority, socioeconomic status, family/community role, ethnicity, education, previous contact with industrialized society, folk beliefs, and familiarity with Western medicine (Jackson 1998; Carrillo 1999).
 - Certain cultures may not have direct terminology for certain Western illnesses. For example, the Mien language has no words for mental illness, and so somatic complaints predominate among Mien patients (Gilman 1992). Another example is that of Iranian women expressing "heart distress." They were seeking alleviation of the stress and anxiety that came with poverty and difficult living conditions, but their Western doctors tried in vain to uncover an organic basis for their complaints.
 - Please see appendix regarding interpreter services
- The exploited Mexican workforce population faces unique health care issues. With many Mexicans traveling periodically (some even daily) back and forth across the US-Mexico border, they are facing perpetual displacement. With that comes identity issues, which are challenging psychologically and in terms of access to health care. Health care services in Mexico are a constitutional right but the quality of such services is inconsistent. In general, the quality of health care in the US may be better for those who get it, but care is predominantly financed via the private sector. With the 1998 Health Care Reform Act, undocumented US inhabitants are ineligible for health care (except emergency care), which encourages delayed care (if any), with consequent poor outcomes. Therefore, overall, migrant workers suffer from inability to establish quality health care in one location or discontinuity of care if they can establish it at all (Ruiz-Beltran 2001).

III. Tuberculosis

- 8.4 million new cases (active) worldwide in 1999; 2 million deaths from TB annually (therefore, 2nd to HIV only as infectious cause of death)
- Approximately 2 billion (approx 1/3 world population) is infected.

- As with US-borne, latent TB (PPD+ without active disease) and active TB (pulmonary or disseminated) have distinct issues.
- Case rates among foreign born 4-5 times higher than among US-born persons and remains high for many years after immigration (Zuber 1997). However, the contribution to the total TB burden in developed countries attributable to immigrants is controversial (Borgdorff 1998).
- In a study of adults immigrating from an area with high TB prevalence, there was no difference in the prevalence of positive PPD in those who did or did not have prior BCG. However, this remains a controversial issue and a new, still not widely used, assay for the secreted antigen ESAT-6 may distinguish between true TB infection and a BCG-reaction.
- At this point, CDC recommendation is to ignore BCG and consider PPD greater than 10mm as positive in those from high prevalence areas.
- For active cases, start INH, RIF, PZA, ETH and pay close attention to resistance.
- For latent cases, INH for 9 months is the (controversial) norm, but recent data advocates for RIF/PZA for immigrants from Vietnam, Haiti and the Philippines (due to high INH resistance and economic factors in those countries; Khan 2002).
- *There is a strong stigma among immigrant communities associated with those having a diagnosis of TB; this greatly affects access to and compliance with care*

IV. Hepatitis B

- Worldwide distribution but particularly common in the Asian-Pacific region and Africa. Evidence of current or previous infection in 80% of the population in the highest risk countries.
- Inhabitants of developing countries usually acquire the infection at birth (50% of total cases in some endemic countries) or in early childhood. In Thailand, for example, 50% of population has serologic evidence of Hep B infection by age 20. Infants born of HBeAg-positive mothers have a greater than 85% chance of becoming infected with Hep B, with a subsequent high risk of a chronic carrier state and clinical liver disease or HCC by their 40's or 50's.
- Hep B is the leading cause of liver cancer worldwide. 1/3 cancer deaths worldwide due to Hep B.
- Three phases (Yong 2002):
 - active replication of the virus, with HBeAg positivity, normal to low levels of AST and ALT
 - immune clearance, age 15-35, with hepatitis flares as a result of T-cell mediated responses to viral antigen. Subsides with development of HBeAg, usually correlating with clinical remission.
 - Residual phase, with HBsAg positivity but loss of HBeAg. Persistent HBeAg is associated with increased risk of hepatocellular carcinoma.
- Approved treatments for chronic hepatitis B include interferon-alpha and lamivudine.
- Given the above, immigrants should be screened and immunized if not carrying sufficient protective antibodies as living in endemic communities puts them at high risk (usually from sex with community members but may also be transmitted by non-sexual contact with family members).
- Controversy over screening protocol specifics (yearly AFP, LFT's and RUQ U/S is one protocol – multiple modes recommended because may have negative AFP with positive U/S cancerous nodule and vice versa). Regardless, screening is critical and must be aggressively pursued early detection of hepatoma offers the only chance of survival.

- An example of cross-cultural changes is taken from the Khmer. In one study (Jackson 1997), it was shown that medical interpreters were translating hepatitis B as "rauk tlaam" a literal translation which was meaningless to 82% of the respondents to the study's questionnaire.

V. Hepatitis C

- More than 100 million people estimated infected worldwide. One study showed HCV Ab positivity in 9% of sub-Saharan adult immigrants to Spain (Lopez-Velez 1997).
- In US, genotype 1 more common (and more difficult to treat, see below); worldwide, genotypes 2 and 3 relatively more common.
- Transmission by needle inoculation, contaminated blood products, sexual or perinatal transmission
- In general, 70-80% of those with HCV become chronic carriers, but most of these mild disease with slow progression. Outcomes highly variable, including complete clearance of virus, viremia without evidence of liver damage, viremia with increased LFT's but no symptoms, long-term stable cirrhosis found only on biopsy, progressive cirrhosis and liver failure, and hepatocellular carcinoma. Percentages of each are not known given lack of long-term prospective study. Analysis of the limited studies (longest of which was 14 years, without non-infected control group) showed symptoms in 10%, cirrhosis in 20%, and rare HCC.
- Therapy indicated for patients 18-60 with persistently elevated ALT, HCV RNA, and liver biopsy evidence of chronic hepatitis with fibrosis or moderate inflammation. Decompensated cirrhosis or persistently normal transaminases usually not treated outside of clinical trials.
- Ribavirin and interferon better sustained response (lack of detectable HCV RNA) than interferon alone. Sustained response approximately twice as high for genotypes 2 and 3. Pegylated interferon (SQ once weekly) is now the standard.
- Interferon major SE's are fatigue, depression, bone marrow suppression; ribavirin major SE's are anemia (hemolysis), skin rash.
- In one study (Kainuma 2002), Japanese herbal ("kampo") medicines were useful for reducing the adverse effects accompanying IFN treatment in patients with chronic hepatitis C without reducing the antiviral effects

VI. Common parasites

- Most common are *Ascaris lumbricoides*, *Strongyloides stercoralis*, *G. lamblia*, *Opisthorchis viverrini*, *Trichuris trichiura*, hookworm (*Ancylostoma* and *Necator*). SEE CHART NEXT PAGE
- Many immigrants have multiple simultaneous infections.
- Parasites can survive for years to decades within immigrants, so beware of the erroneous assumption that those already in the US for an extended length of time are not at risk.
- For the same reason, be particularly careful about starting steroids in any immigrant. Should always test for strongyloides first, to avoid a florid and potentially fatal disseminated infection. If even mild eosinophilia noted, presume infection (even with negative O+P) and treat first with albendazole or ivermectin.
- In the HMC international clinic, many providers empirically treat all immigrants with albendazole, based on a NEJM study (Muennig 1999). Albendazole is effective against all of the above as well as *Taenia solium* and *Hymenolepis nana*. The Muennig study compared empiric albendazole (400 mg po qd x 5 days) with universal screening (and treatment of only those with positive O+P exam) and no screening ("watchful waiting") for immigrants from 5 key regions (Asia, the Middle East, sub-Saharan Africa, Eastern Europe, Latin America, the Caribbean). The study showed that at least 33 deaths, 374 hospitalizations, and 4.2 million dollars would be saved annually, in the US, if all were treated presumptively versus watchful

waiting. The cost savings were even greater comparing presumptive treatment with universal screening, which only saved 12 lives annually per this analysis. One limitation is that only a single stool sample was presumed in the screening arm of analysis, and multiple samples (3 are recommended in our clinic) is known to increase the yield. However, in theory, obtaining additional O+P would increase lives saved but would increase costs. This would appear to be beneficial only if number of lives saved increased dramatically above that of presumptive treatment.

COMPLICATIONS OF MAJOR PATHOGENIC PARASITES	
Pathogen	Complication
<i>Ascaris lumbricoides</i>	Intestinal obstruction
<i>Entamoeba histolytica</i>	Systemic infection
<i>Giardia lamblia</i>	Diarrhea
Hookworm	Anemia
<i>Opisthorchis sinensis</i> (esp. Laos, Cambodia, Thailand)	Cholangiocarcinoma of gallbladder
<i>Strongyloides stercoralis</i>	Diarrhea
	Malabsorption
	Loeffler's syndrome
	Dissemination with immunosuppression
<i>Trichuris trichiura</i>	Dysentery
	Rectal prolapse

VII. HIV

- SE Asia and sub-Saharan Africa are endemic hotbeds for HIV
- There is considerable debate about how much of that endemicity transfers to Western societies, i.e. the US, which accommodate high levels of immigration.
- In one study (Harawa 2002) of clients of STD clinics, the overall HIV prevalence was similar for those foreign born (1.6%) and US-born (1.8%). How this differs from non-STD clinic population is difficult to characterize. Notably, considerable variation exists depending on country of origin.

Birth region no., % HIV+ (95% CI)

Caribbean/West Indies	618; 2.9 (1.6, 4.2)
Central America/Mexico	20 208; 1.6 (1.4, 1.8)
East Asia/Pacific Islands	383; 0.5 (0.0, 1.2)
Europe/former USSR	519; 1.7 (0.6, 2.9)
North Africa/Middle East	121; 3.3 (0.0, 6.5)
Sub-Saharan Africa	316; 2.2 (0.6, 3.8)
South/Southeast Asia	574; 0.7 (0.0, 1.4)
South America	436; 1.6 (0.4, 2.8)

Importantly, these data (i.e. table on previous page) perhaps reflect relatively higher illegal immigration from those regions (i.e. Middle East, Caribbean) with HIV positivity out of proportion to the presumed patterns of HIV positivity worldwide (i.e. highest in sub-Saharan Africa and SE Asia). Alternatively, this

may reflect discrepancies between ethnic groups in education or cultural practices subsequent to immigration may explain these findings. One study (Deren 2003) showed higher levels of risky behavior, among New York City IV drug users, in those foreign born as compared to US-born. In fact the Harawa data supports this, and suggests that most HIV infection in the foreign-born, at least the population presenting to STD clinics, occurs *after* immigration.

Regardless of above, it is clear that refugees and mobile populations are at much higher risk for HIV, even as compared to non-refugees in their countries of origin. This is thought due to lack of education and high risk activity in camps and other displacement contexts. There is only a presumption that the HIV in this high risk group is not directly transferable to Western populations (i.e. the US) given current screening practices, but the effectiveness of such screening is not clearly documented. Post-immigration practices (above) suggest that education remains a top priority.

- Each cultural group has unique issues with the interpretation of HIV. We use the Vietnamese population as one example (notes extracted from ETHNOMED):
 - No vernacular translations for HIV/AIDS exist in Vietnamese. This may be due to the relatively new appearance of this disease entity in Vietnam. Many Vietnamese-Americans learn about HIV / AIDS through the American media or by reading Vietnamese health journals and other periodicals. Vietnamese culture is characterized by strong taboos against open discussions or exhibits of sexuality. Perhaps because of this, there is an absence, in the Vietnamese language, of suitable terms for discussing sexuality. One example is the subject of homosexuality. The Vietnamese technical terms for homosexuality, "nguai dong tinh" and "nguai dong luyen ai" (literally "people-same-love") are meaningless to most Vietnamese people. This also represents the official denial by Vietnamese government spokesmen that there is no evidence for homosexuality in their country.
 - Studies involving the Vietnamese-American community in Orange County, California, the largest population of Vietnamese-Americans in the United States found that a significant minority still believed that the virus could be contracted through casual contact such as touching, co-attendance at school with an infected child, working in occupational settings with an infected individual, and from toilet seats or shared utensils. Among those studied, 36% of young men, 45% of older men, and 55% of women agreed with the statement that people with AIDS should be quarantined [Note: it is not clear how different this is from non-Vietnamese opinion].
 - In another study, subjects thought that anal intercourse was safe because the anus is dry. Oral intercourse was considered risky because the mouth is wet. They also thought that AIDS can pass easily through skin, so masturbation to orgasm was more dangerous than anal intercourse if semen landed on the skin. [Note: again, it is not clear how different this is from non-Vietnamese opinion].
 - When asked how health care providers could most effectively approach the topic of STDs, HIV / AIDS, and reproductive health with Vietnamese patients, each of the key informants emphasized the need to establish relationships first before delving into questions regarding intimate personal information. These topics include sexual orientation, sexual practices, contraception and family planning. The informants expressed the importance in considering the degree of acculturation of the patient by assessing the patient's age, sex, number of years in the United States, former social status in Vietnam, current socioeconomic status in the United States, and education level.

VIII. Mental health (adapted from Richard Ater's discussion in EthnoMed; Ater's text references primary literature)

- Nowhere are the health care needs of refugees more pronounced than in the realm of mental health. Refugees are vulnerable to psychological distress due to uprooting and adjustment difficulties in the resettlement country, such as language, occupational problems, and cultural conflict. Uprooting creates culture shock, a stress response to a new situation in which former patterns of behavior are ineffective and basic cues for social intercourse are absent.
-

- The clinical and research literature shows a significant degree of psychological stress among refugees with relatively high levels of physical and psychological dysfunction during the first two years of resettlement; after three years, there was some improvement and increased adaptability, but there was still serious and pervasive adjustment problems affecting some sectors of the refugee population, such as high levels of somatization, depression, and post traumatic stress disorder. These symptoms have even been noted five years after resettlement.
- Some studies have shown that much of the depression and anxiety of refugees can be alleviated if they can keep family ties somewhat intact and can develop social networks with others from their culture. Other studies, however, have shown that while family can be a valuable source of emotional support, immigrant families can also be too overwhelmed by their own immigration demands to provide support or can generate additional stress for their members.
- Mental health providers should elicit their refugee client's immigration history: length of time in the country, circumstances of flight and first asylum, and who and what was lost. This information is critical for understanding client's adjustment and problems, such as identifying post-traumatic stress disorder (PTSD). It is important to assess for specific symptoms of PTSD and whether they are being confused with other symptoms, such as grieving, losses of family, country, and lifestyle, depression associated with downward social status and inability to find work.
- Many refugees come from parts of the world where torture is still prevalent. This population suffers from significant problems besides those that affect other refugees. Torture survivors suffer from high levels of depression and anxiety with "existential" aspects that are not a part of the traditional schemata; these may be reflective of a more subtle and specific aspect of psychopathology or may be part of a more pervasive problem of "complex PTSD." Psychotic symptoms and suicide attempts are relatively frequent; these constitute severe problems which lead to psychiatric assessment and treatment. Domestic violence, aggression, alcohol problems, and psychological disorders among the children of survivors are also frequent concomitants of formal psychiatric disorders in torture victims.
- Traditional psychiatric approaches such as individual insight or supportive psychotherapy with psychoactive medications have had a limited success; however support groups for such refugees composed of others from their background and experience appear to be helpful.
- The use of traditional healers from the refugee's home culture can assist the refugee in getting access to health care in a culturally acceptable and meaningful way.

IX. End-of-life issues (Crawley 2002)

- End-of-life care is difficult in general and often even more so when caring for patients from foreign cultural backgrounds
- Being sensitive to cultural differences may improve end-of-life care
- The autonomy and informed consent common to US health care may be foreign to immigrants
- Physicians' well-intentioned efforts to transition to palliative care may be met with hostility and mistrust (perhaps more so than in US-born; minorities' mistrust of the health care system is related to historical events such as abuses in medical research; there is data to support physician bias against minorities).
- A tendency to lump large populations groups under broad categories tends to obscure important differences (i.e. "Asians never withdraw support"; this issue relevant to other topics in this handout as well).

APPENDIX

Guidelines for Interpreted Visits

Ellie Graham, MD

1. **Introduce yourself to the family and to the interpreter.**
2. **Write down the interpreter's name and the interview language on the progress note.**
3. **Do a pre-visit conference with the interpreter.** This can be done in the room with the family unless sensitive issues need to be discussed. The following should be covered.
 - *Establish the style of interpretation.* Phrased interpretation where the provider interviews in short phrases that are translated as accurately as possible by the interpreter, is usually the easiest to use. Simultaneous interpretation is often confusing to both patient and provider but useful for short statement like how to take medicines. Summary interpretation, where the provider or the patient make long statements and the interpreter tries to summarize them can be used for simple problems and to explore sensitive areas such as sexuality but can lead to errors...use with caution.
 - *Ask the interpreter for feedback.* Ask them to tell you if they don't understand terms you use or the terms aren't easily translated. Tell them to also tell you if it seems that the patient is expressing a cultural related idea or concept that they think you may not understand.
 - *Tell the interpreter where you want them to sit.* Beside the provider or just in back of them is best because the patient looks at both the provider and the interpreter.
 - *Establish the context and the nature of the visit.* "Nasara is coming in to see me today for a follow-up visit. She has been depressed and I will be discussing this first"... "Anh is a new patient to our clinic. I will be asking him many questions about his past health and his family and then will do a complete physical examination"...
 - *Determine if there are any time constraints on the interpreter.*
 - *Ask the interpreter if they have any concerns that they want to share with you before the visit and step out into the hallway to talk with them.*
4. **Direct questions to the patient, not to the interpreter unless they are meant for the interpreter.** If you are going to pause and ask the interpreter a question in English, tell the patient that this is what you will be doing.
5. **Do a post-visit conference with the interpreter outside the room if you have concerns about the interview.** This is particularly helpful if the history seems very vague and unclear. It can help determine if there was a language problem...the patient and the interpreter speak different dialects or have accents that are hard for each to understand, or if the patient is mentally ill or has some other problem that clouds communication.

Gender and age of the interpreter may be very important. In many ethnic groups, women and girls prefer a female interpreter and some men and boys prefer a male. Older patients may want a more mature interpreter. Don't use children as interpreters. This distorts power relationships within families.

HISTORY TAKING KEYS

Table 1. Eliciting Patient Information and Negotiating

Exploring the meaning of the illness

Explanatory model

- What do you think has caused your problem? What do you call it?
- Why do you think it started when it did?
- How does it affect your life?
- How severe is it? What worries you the most?
- What kind of treatment do you think would work?

The patient's agenda

- How can I be most helpful to you?
- What is most important for you?

Illness behavior

- Have you seen anyone else about this problem besides a physician?
- Have you used nonmedical remedies or treatments for your problem?
- Who advises you about your health?

Social context "review of systems"

Control over environment

- Is money a big problem in your life? Are you ever short of food or clothing?
- How do you keep track of appointments? Are you more concerned about how your health affects you right now or how it might affect you in the future?

Change in environment

- Where are you from?
- What made you decide to come to this country (city, town)? When did you come?
- How have you found life here compared to life in your country (city, town)? What was medical care like there compared with here?

Social stressors and support network

- What is causing the most difficulty or stress in your life? How do you deal with this?
- Do you have friends or relatives that you can call on for help? Who are they? Do they live close to you?
- Are you very involved in a religious or social group? Do you feel that God (or a higher power) provides a strong source of support in your life?

Literacy and language

- Do you have trouble reading your medication bottles or appointment slips?
- What language do you speak at home? Do you ever feel that you have difficulty communicating everything you want to say to the doctor or staff?

Negotiation

Negotiating explanatory models

- Explore patient's explanatory model
- Determine how the explanatory model differs from the biomedical model and how strongly the patient adheres to it
- Describe that biomedical explanatory model in understandable terms, using as much of the patient's terminology and conceptualization as necessary
- Determine the patient's degree of understanding and acceptance of the biomedical model as it is described
- If conflict remains, reevaluate core cultural issues and social context (for example, bring in family members or maximize interpretation)

Negotiating for management options

- Describe specific management options (tests, treatments, or procedures) in understandable terms
 - Prioritize management options
 - Determine the patient's priorities
 - Present a reasonable management plan
 - Determine the patient's level of acceptance of this plan (do not assume acceptance—inquire directly)
 - If conflict remains, focus negotiation on higher priorities
-

PHYSICAL EXAM KEYS (Avery 2001)

General appearance: Nutritional status, wasting (HIV infection, TB, visceral leishmaniasis, other chronic illness)

Eyes: Trachoma, onchocerciasis, loiasis, bacterial conjunctivitis, vitamin A deficiency

Head and neck: Otitis media or externa, perforated tympanic membrane, oral thrush, dental infections; if from endemic regions, mucocutaneous leishmaniasis, rhinoscleroma, rhinosporidiosis, or "leonine facies" of Hansen's disease

Adenopathy: HIV infection, human T-cell lymphotropic virus type I (HTLV-I), Epstein-Barr virus, TB, Hansen's disease, melioidosis, chancroid, lymphogranuloma venereum, tularemia, plague, and many others

Chest, with observation of cough and sputum production: Asthma, bronchitis, pneumonia, pleural effusion, TB, paragonimiasis, melioidosis, malignancy

Heart: Congenital heart disease, rheumatic heart disease, endocarditis, dilated cardiomyopathy

Abdomen: Tenderness, masses, hepatosplenomegaly (schistosomiasis, visceral leishmaniasis, tropical splenomegaly), ascites (advanced liver disease, tuberculous or bacterial peritonitis, malignancy), focal tenderness (bacterial abscess, amebic liver abscess, appendicitis)

Pelvis: Genital ulcers (syphilis, chancroid, herpes), cervicitis (gonorrhea, chlamydia), pelvic inflammatory disease, sequelae of female genital mutilation, endometritis (if recent delivery or abortion)

Extremities: Lymphedema (filariasis), loss of distal digits (Hansen's disease), generalized edema (cardiac or liver disease or postmalarial nephrotic syndrome), Madura foot, dracunculiasis, deformities due to uncorrected congenital abnormalities or trauma

Neurology: Chronic dementing disease (HIV infection, African trypanosomiasis, others), focal findings (cerebral cysticercosis, tuberculoma, toxoplasmosis, paragonimiasis, hydatid disease), spastic paraparesis (HTLV-I), asymmetric leg weakness (prior polio)

Skin: Anesthetic lesions (Hansen's disease), ulcers (leishmaniasis), lesions or rashes (lice, scabies, yaws, pinta, cutaneous larva migrans, dracunculiasis, loiasis, onchocerciasis, chromomycosis, mycetoma, myiasis, *Penicillium marneffei*), tache noire with or without rash (acute rickettsial infection)

REFERENCES

1. Avery R. Immigrant women's health: Infectious diseases – Part 1. WJM 2001;175:208-211.
2. Borgdorff MW et al. Analysis of tuberculosis transmission between nationalities in the Netherlands in the period 1993-95 using DNA fingerprinting. Am J Epi 1998;147:187-195.
3. Carrillo JE et al. Cross-cultural primary care: A patient-based approach. Ann Intern Med 1999;130:829-834.
4. Crawley et al. Strategies for culturally effective end-of-life care. Ann Int Med 2002;136:673-9.
5. Deren S et al. Migration and HIV risk behaviors: Puerto Rican drug injectors in New York City and Puerto Rico. AJPH 2003;93:812-6.
6. **ETHNOMED** (<http://ethnomed.org>). *This superb resource references multiple health care issues for all major ethnic groups at HMC.*
7. Gilman SC et al. Use of traditional and modern health services by Laotian refugees. West J Med 1992;157:310-5.
8. Harawa NT et al. HIV prevalence among foreign-born and US-born clients of public STD clinics. AJPH 2002;92:1958-1963.
9. Hollifield M et al. Measuring trauma and health status in refugees. JAMA 2002;288:611-621.

10. Hynes M et al. Reproductive health indicators and outcomes among refugee and internally displaced persons in post-emergency phase camps. *JAMA* 2002;288:595- 603.
11. Jackson JC et al. Hepatitis B among the Khmer. *J Gen Intern Med* 1997;12:292-298.
12. Jackson C. Medical Interpretation, in *Handbook of Immigrant Health*, edited by Loue. Plenum Press, New York, 1998.
13. Kainuma et al. The efficacy of herbal medicine (kampo) in reducing the adverse effects of IFN-beta in chronic hepatitis C. *Am J Chin Med* 2002;30:355-67.
14. Khan K et al. Global drug-resistance patterns and the management of latent tuberculosis infection in immigrants to the US. *N Eng J Med* 2002;347:1850- 9.
15. Kleinman A et al. Culture, Illness, and Care: Clinic lessons from anthropologic and cross-cultural research. *Annals of Internal Medicine* 1978;88:251-258.
16. Liang TJ et al. Pathogenesis, natural history, treatment and prevention of hepatitis C. *Ann Int Med* 2000;132:296-305.
17. Lopez- Velez R et al. Prevalence of hepatitis B, C, and D markers in sub-Saharan African immigrants. *J Clin Gastroenterol* 1997;25:650-2.
18. Meropol SB. Health status of pediatric refugees in Buffalo , NY. *Arch Pediatr Adolesc Med* 1995;149:887-92.
19. Muennig M et al. The cost effectiveness of strategies for the treatment of intestinal parasites in immigrants. *NEJM* 1999;340:773-9.
20. Ruiz- Beltran M, Kamau JK. The socio-economic and cultural impediments to well-being along the US-Mexico border. *J Comm Health* 2001;26:123- 132.
21. Spiegel P et al. Health programmes and policies associated with decreased mortality in displaced people in post-emergency phase camps. *Lancet* 2002;360:1927- 34.
22. Walker PF, Jaranson J. Refugee and Immigrant Health Care. *Medical Clinics of North America*. 1999; 83(4): 1103-1121. *Note: this article references much of the primary data used for this handout.*
23. Yong H et al. Hepatitis B e-antigen and the risk of hepatocellular carcinoma. *NEJM* 2002;347:168-74.
24. Zuber PLF et al. Long-term risk of tuberculosis among foreign-born persons in the United States. *JAMA* 1997;278:304-7.